

Supplementary Table 1. A full list of cancer genes.

| Gene Symbol | Gene full name | Entrez Gene ID | Chr | Chr Band | Somatic | Germline | Tumour Types (Somatic) | Tumour Types (Germline) | Cancer Synd | Tissue Type | Molecular Genetics | Mut Types | Translocation Partner | Other Germline Mut | Other Synd | Syn |
|--------------------|--|-----------------------|------------|-----------------|----------------|-----------------|-------------------------------|--------------------------------|--------------------|--------------------|---------------------------|------------------|------------------------------|---------------------------|-------------------|---|
| ABI1 | Abl-interactor 1 | 10006 | 10 | 10p11.2 | yes | | AML | | | L | Dom | T | MLL | | | ABI1; E3B1; ABI-1; SSH3BP1; 10006 |
| ABL1 | V-abl Abelson murine leukemia viral oncogene homolog 1 | 25 | 9 | 9q34.1 | yes | | CML; ALL; T-ALL | | | L | Dom | T; Mis | BCR; ETV6; NUP214 | | | ABL1; p150; ABL; c-ABL; JTK7; bcr/abl; v-abl; P00519; 25; ENSG00000097007 |
| ABL2 | C-abl oncogene 2; non-receptor tyrosine kinase | 27 | 1 | 1q24-q25 | yes | | AML | | | L | Dom | T | ETV6 | | | ABL2; ARG; RP11-177A2_3; ABLL; ENSG00000143322; P42684; 27 |
| ACSL3 | Acyl-coa synthetase long-chain family member 3 | 2181 | 2 | 2q36 | yes | | Prostate | | | E | Dom | T | ETV1 | | | 2181; ASPM; PRO2194; ACS3; FACL3; O95573; ENSG00000123983; ACSL3 |
| AF15Q14 | AF15q14 protein | 57082 | 15 | 15q14 | yes | | AML | | | L | Dom | T | MLL | | | CASC5; AF15Q14; Q8NG31; D40; ENSG00000137812; 57082 |
| AF1Q | ALL1-fused gene from chromosome 1q | 10962 | 1 | 1q21 | yes | | ALL | | | L | Dom | T | MLL | | | MLLT11; Q13015; AF1Q; ENSG00000213190; 10962 |
| AF3p21 | SH3 protein interacting with Nck; 90 kda (ALL1 fused gene from 3p21) | 51517 | 3 | 3p21 | yes | | ALL | | | L | Dom | T | MLL | | | Q9NZQ3; AF3P21; WISH; ORF1; WASLBP; SPIN90; ENSG00000213672; NCKIPSD; 51517 |
| AF5q31 | ALL1 fused gene from 5q31 | 27125 | 5 | 5q31 | yes | | ALL | | | L | Dom | T | MLL | | | 27125; Q9UHB7; MCEF; AF5Q31; ENSG00000072364; AFF4 |

| | | | | | | | | | | | | | | | | |
|--------------|---|-------|----|---------------|-----|-----|------------------------------------|---------------|------------------------|---------|-----|-----------|---|--|--|---|
| AKAP9 | A kinase (PRKA) anchor protein (yotiao) 9 | 10142 | 7 | 7q21-q22 | yes | | Papillary thyroid | | | E | Dom | T | BRAF | | | KIAA0803; AKAP350; CG-NAP; MU-RMS-40_16A; PRKA9; YOTIAO; HYPERION; AKAP450; Q99996; ENSG00000127914; 10142; AKAP9 |
| AKT1 | V-akt murine thymoma viral oncogene homolog 1 | 207 | 14 | 14q32.32 | yes | | Breast; colorectal; ovarian; NSCLC | | | E | Dom | Mis | | | | P31749; AKT1_NEW; 207; ENSG00000142208; AKT; MGC99656; PKB; PKB-ALPHA; PRKBA; RAC; RAC-ALPHA |
| AKT2 | V-akt murine thymoma viral oncogene homolog 2 | 208 | 19 | 19q13.1-q13.2 | yes | | Ovarian; pancreatic | | | E | Dom | A | | | | AKT2; PRKBB; P31751; RAC-BETA; ENSG00000105221; 208; PKBBETA |
| ALDH2 | Aldehyde dehydrogenase 2 family (mitochondrial) | 217 | 12 | 12q24.2 | yes | | Leiomyoma | | | M | Dom | T | HMGA2 | | | ALDH2; ALDHI; ALDM; MGC1806; P05091; ALDH-E2; ENSG00000111275; 217 |
| ALK | Anaplastic lymphoma kinase (Ki-1) | 238 | 2 | 2p23 | yes | yes | ALCL; NSCLC; neuroblastoma | Neuroblastoma | Familial neuroblastoma | L; E; M | Dom | T; Mis; A | NPM1; TPM3; TFG; TPM4; ATIC; CLTC; MSN; ALO17; CARS; EML4; KIF5B; C2orf22 | | | ENSG00000171094; CD246; TFG/ALK; Q9UM73; ALK; 238 |
| ALO17 | KIAA1618 protein | 57674 | 17 | 17q25.3 | yes | | ALCL | | | L | Dom | T | ALK | | | 57674; ENSG00000173821; C17orf27; KIAA1554; Q63HN8; RNF213 |

| | | | | | | | | | | | | | | | |
|-----------------|--|--------|----|---------|-----|-----|--|--|---|---------|-----|-----------------|------|--|---|
| AMER1 | APC membrane recruitment protein 1 | 139285 | X | Xq11.2 | yes | | Wilms tumour | | | O | Rec | F; D; N; Mis | | | AMER1; RP11-403E24_2; WTX; FLJ39827; ENSG00000184675; FAM123B; 139285 |
| APC | Adenomatous polyposis of the colon gene | 324 | 5 | 5q21 | yes | yes | Colorectal; pancreatic; desmoid; hepatoblastoma; glioma; other CNS | Colorectal; pancreatic; desmoid; hepatoblastoma; glioma; other CNS | Adenomatous polyposis coli; Turcot syndrome | E; M; O | Rec | D; Mis; N; F; S | | | 324; DP2; DP2_5; DP3; GS; FPC; FAP; ENSG00000134982; P25054; APC |
| ARHGEF12 | RHO guanine nucleotide exchange factor (GEF) 12 (LARG) | 23365 | 11 | 11q23.3 | yes | | AML | | | L | Dom | T | MLL | | 23365; Q9NZN5; PRO2792; DKFZp686O2372; LARG; KIAA0382; ENSG00000196914; ARHGEF12 |
| ARHH | RAS homolog gene family; member H (TTF) | 399 | 4 | 4p13 | yes | | NHL | | | L | Dom | T | BCL6 | | RHOH; TTF; RhoH; ARHH; ENSG00000168421; 399 |
| ARID1A | AT rich interactive domain 1A (SWI-like) | 8289 | 1 | 1p35.3 | yes | | Clear cell ovarian carcinoma; RCC | | | E | Rec | Mis; N; F; S; D | | | 8289; BAF250; BAF250a; P270; RP1-50O24_1; B120; BM029; C1orf4; SMARCF1; ENSG00000117713; ARID1A |
| ARID2 | AT rich interactive domain 2 | 196528 | 12 | 12q12 | yes | | Hepatocellular carcinoma | | | E | Rec | N; S; F | | | 196528; ENSG00000189079; BAF200; DKFZp686G052; DKFZp779P0222; FLJ30619; KIAA1557; p200; Q68CP9; ARID2 |

| | | | | | | | | | | | | | | | |
|----------------|--|--------|----|---------|-----|-----|--|--|-----------------------|------|-----|-----------------|------------|--|--|
| ARNT | Aryl hydrocarbon receptor nuclear translocator | 405 | 1 | 1q21 | yes | | AML | | | L | Dom | T | ETV6 | | ARNT; HIF1BETA; TANGO; HIF1B; HIF-1beta; P27540; ENSG00000143437; 405 |
| ASPSCR1 | Alveolar soft part sarcoma chromosome region; candidate 1 | 79058 | 17 | 17q25 | yes | | Alveolar soft part sarcoma | | | M | Dom | T | TFE3 | | 79058; Q9BZE9; ENSG00000169696; ASPSCR1 |
| ASXL1 | Additional sex combs like 1 | 171023 | 20 | 20q11.1 | yes | | MDS; CMML | | | L | Rec | F; N; Mis | | | 171023; KIAA0978; MGC117280; MGC71111; Q8IXJ9; ENSG00000171456; ASXL1 |
| ATF1 | Activating transcription factor 1 | 466 | 12 | 12q13 | yes | | Malignant melanoma of soft parts; angiomatoid fibrous histiocytoma | | | E; M | Dom | T | EWSR1; FUS | | 466; TREB36; P18846; ENSG00000123268; ATF1 |
| ATIC | 5-Aminoimidazole-4-carboxamide ribonucleotide formyltransferase/IMP cyclohydrolase | 471 | 2 | 2q35 | yes | | ALCL | | | L | Dom | T | ALK | | P31939; IMPCHASE; PURH; AICARFT; ENSG00000138363; 471; ATIC |
| ATM | Ataxia telangiectasia mutated | 472 | 11 | 11q22.3 | yes | yes | T-PLL | Leukaemia; lymphoma; medulloblastoma; glioma | Ataxia-telangiectasia | L; O | Rec | D; Mis; N; F; S | | | 472; TELO1; ATA; ATC; ATDC; MGC74674; Q13315; AT1; DKFZp781A0353; ATE; ATD; TEL1; ENSG00000149311; ATM |

| | | | | | | | | | | | | | | | |
|---------------|---|------|----|---------------|-----|-----|---|------------------------------|--|------|-----|-----------------|-----|---|--|
| ATP1A1 | ATPase; Na ⁺ /K ⁺ transporting; alpha 1 polypeptide | 476 | 1 | p21 | yes | | Adrenal aldosterone producing adenoma | | | E | Dom | Mis; O | | | P05023; ATP1A1; 476; ENSG00000163399; MGC3285; MGC51750 |
| ATP2B3 | ATPase; Ca ⁺⁺ transporting; plasma membrane 3 | 492 | X | q28 | yes | | Adrenal aldosterone producing adenoma | | | E | Dom | O | | | ATP2B3; PMCA3; ENSG00000067842; 492 |
| ATRX | Alpha thalassemia/mental retardation syndrome X-linked | 546 | X | Xq21.1 | yes | | Pancreatic neuroendocrine tumours; paediatric GBM | | | E | Rec | Mis; F; N | yes | ATR-X (alpha thalassemia/mental retardation) syndrome | P46100; ATRX_ENST00000373344; 546; ATR2; MGC2094; MRXHF1; RAD54; RAD54L; SFM1; SHS; XH2; XNP; ZNF-HX |
| AXIN1 | Axin 1 | 8312 | 16 | 16p13.3 | yes | yes | Colorectal; endometrial; prostate and hepatocellular carcinomas; hepatoblastoma; sporadic medulloblastoma | | | E; O | Rec | D; Mis; N; F; S | | | 8312; LA16c-314G4_3; MGC52315; AXIN; ENSG00000103126; O15169; AXIN1 |
| BAP1 | BRCA1 associated protein-1 (ubiquitin carboxy-terminal hydrolase) | 8314 | 3 | 3p21.31-p21.2 | yes | | Uveal melanoma; breast; NSCLC; RCC | Mesothelioma; uveal melanoma | | E | Rec | N; Mis; F; S; O | | | 8314; DKFZp686N04275; FLJ37180; HUCEP-13; hucep-6; KIAA0272; ENSG00000163930; BAP1; FLJ35406; Q92560 |

| | | | | | | | | | | | | | | | |
|---------------|---|-------|----|-------------|-----|--|----------|--|--|---|-----|--------|--|--|--|
| BCL10 | B-cell CLL/lymphoma a 10 | 8915 | 1 | 1p22 | yes | | MALT | | | L | Dom | T | IGH@ | | BCL10; CIPER; CLAP; mE10; CARMEN; c- E10; ENSG00000142867; 8915 |
| BCL11A | B-cell CLL/lymphoma a 11A | 53335 | 2 | 2p13 | yes | | B-CLL | | | L | Dom | T | IGH@ | | KIAA1809; BCL11A-L; FLJ10173; EVI9; Q9H165; BCL11A-XL; BCL11A-S; CTIP1; FLJ34997; ENSG00000119866; 53335; BCL11A |
| BCL11B | B-cell CLL/lymphoma a 11B (CTIP2) | 64919 | 14 | 14q32. 1 | yes | | T-ALL | | | L | Dom | T | TLX3 | | BCL11B; RIT1; CTIP- 2; Q9C0K0; hRIT1- alpha; CTIP2; 64919; ENSG00000127152 |
| BCL2 | B-cell CLL/lymphoma a 2 | 596 | 18 | 18q21. 3 | yes | | NHL; CLL | | | L | Dom | T | IGH@ | | BCL2; Bcl-2; ENSG00000171791; 596 |
| BCL3 | B-cell CLL/lymphoma a 3 | 602 | 19 | 19q13 | yes | | CLL | | | L | Dom | T | IGH@ | | BCL3; P20749; BCL4; D19S37; ENSG00000069399; 602 |
| BCL5 | B-cell CLL/lymphoma a 5 | 603 | 17 | 17q22 | yes | | CLL | | | L | Dom | T | MYC | | |
| BCL6 | B-cell CLL/lymphoma a 6 | 604 | 3 | 3q27 | yes | | NHL; CLL | | | L | Dom | T; Mis | IG loci; ZNFN1A1; LCP1; PIM1; TFRC; CIITA; NACA; HSPCB; HSPCA; HIST1H4I; IL21R; POU2AF1; ARHH; EIF4A2; SFRS3 | | BCL6A; BCL5; ZNF51; LAZ3; P41182; ZBTB27; ENSG00000113916; 604; BCL6 |
| BCL7A | B-cell CLL/lymphoma a 7A | 605 | 12 | 12q24. 1 | yes | | BNHL | | | L | Dom | T | MYC | | BCL7A; BCL7; ENSG00000110987; 605 |

| | | | | | | | | | | | | | | | | |
|---------------|--|--------|----|----------|-----|-----|---|-------------------------|------|---|------|--------------------|-------------------------|-----|-----------------------------------|---|
| BCL9 | B-cell CLL/lymphoma 9 | 607 | 1 | 1q21 | yes | | B-ALL | | | L | Dom | T | IGH@; IGL@ | | | 607; LGS; MGC131591; ENSG00000116128; BCL9 |
| BCOR | BCL6 corepressor | 54880 | X | Xp11.4 | yes | | Retinoblastoma; AML; APL (translocation) | | | | Rec | F; N; S; T | RARA | yes | oculo-facio-cardio-dental genetic | ANOP2; MGC71031; FLJ20285; MGC131961; KIAA1575; MCOPS2; MAA2; ENSG00000183337; BCOR; 54880; FLJ38041 |
| BCR | Breakpoint cluster region | 613 | 22 | 22q11.21 | yes | | CML; ALL; AML | | | L | Dom | T | ABL1; FGFR1; JAK2 | | | P11274; FLJ16453; PHL; ALL; D22S662; CML; D22S11; BCR1; BCR; ENSG00000186716; 613 |
| BHD | Folliculin; Birt-Hogg-Dube syndrome | 201163 | 17 | 17p11.2 | | yes | Renal; fibrofolliculomas; trichodiscomas | Birt-Hogg-Dube syndrome | E; M | | Rec? | Mis. N; F | | | | 201163; BHD; FLCL; MGC17998; MGC23445; ENSG00000154803; FLCN |
| BIRC3 | Baculoviral IAP repeat-containing 3 | 330 | 11 | 11q22 | yes | | CLL; MALT; MCL; MM | | | L | Dom | D; F; N; T; Mis | MALT1 | | | BIRC3; AIP1; HAIP1; hiap-1; RNF49; MALT2; cIAP2; API2; Q13489; HIAP1; ENSG00000023445; 330; CIAP2; MIHC |
| BLM | Bloom syndrome | 641 | 15 | 15q26.1 | | yes | Leukaemia; lymphoma; skin squamous cell; other tumour types | Bloom syndrome | L; E | | Rec | Mis; N; F | | | | RECQL3; MGC131620; BS; MGC126616; RECQL2; RECQ2; MGC131618; ENSG00000197299; BLM; 641 |
| BMPRIA | Bone morphogenetic protein receptor; type IA | 657 | 10 | 10q22.3 | | yes | gastrointestinal polyps | Juvenile polyposis | E | | Rec | Mis; N; F | | | | 657; ACVRLK3; CD292; ALK3; P36894; ENSG00000107779; BMPRIA |

| | | | | | | | | | | | | | | | | |
|--------------|---|-------|----|---------|-----|-----|---|--|---|------|-----|-----------------|-----------------|-----|---------------------------------|---|
| BRAF | V-raf murine sarcoma viral oncogene homolog B1 | 673 | 7 | 7q34 | yes | | Melanoma; colorectal; papillary thyroid; borderline ovarian; NSCLC; cholangiocarcinoma; pilocytic astrocytoma | | | E | Dom | Mis; T; O | AKAP9; KIAA1549 | yes | Cardio-facio-cutaneous syndrome | P15056; MGC126806; BRAF1; B-raf 1; RAFB1; MGC138284; ENSG00000157764; 673; BRAF; B-raf1 |
| BRCA1 | Familial breast/ovarian cancer gene 1 | 672 | 17 | 17q21 | yes | yes | Ovarian | Breast; ovarian | Hereditary breast/ovarian cancer | E | Rec | D; Mis; N; F; S | | | | IRIS; BRCA1; PSCP; RNF53; BRCC1; ENSG0000012048; 672; BRCA1 |
| BRCA2 | Familial breast/ovarian cancer gene 2 | 675 | 13 | 13q12 | yes | yes | Breast; ovarian; pancreatic | Breast; ovarian; pancreatic; leukaemia (FANCB; FANCD1) | Hereditary breast/ovarian cancer | L; E | Rec | D; Mis; N; F; S | | | | BRCA2; FAD; RP11-298P3.4; FANCB; BRCC2; FANCD1; FANCD; FAD1; FADC; ENSG00000139618; 675 |
| BRD3 | Bromodomain containing 3 | 8019 | 9 | 9q34 | yes | | Lethal midline carcinoma of young people | | | E | Dom | T | C15orf55 | | | 8019; KIAA0043; RING3L; ORFX; Q15059; BRD3; ENSG00000169925 |
| BRD4 | Bromodomain containing 4 | 23476 | 19 | 19p13.1 | yes | | Lethal midline carcinoma of young people | | | E | Dom | T | C15orf55 | | | 23476; MCAP; O60885; CAP; HUNKI; ENSG00000141867; BRD4 |
| BRIP1 | BRCA1 interacting protein C-terminal helicase 1 | 83990 | 17 | 17q22 | | yes | | AML; leukaemia; breast | Fanconi anaemia J; breast cancer susceptibility | L; E | Rec | F; N; Mis | | | | 83990; MGC126521; OF; MGC126523; Q9BX63; FLJ90232; FANCI; BACH1; ENSG00000136492; BRIP1 |

| | | | | | | | | | | | | | | | | |
|-----------------|---|--------|----|----------|-----|-----|--------------------------|------------------------------|--|---|-----|--------------|------------|--|--|--|
| BTG1 | B-cell translocation gene 1; anti-proliferative | 694 | 12 | 12q22 | yes | | BCLL | | | L | Dom | T | MYC | | | BTG1; P62324; ENSG00000133639; 694 |
| BUB1B | BUB1 budding uninhibited by benzimidazoles 1 homolog beta (yeast) | 701 | 15 | 15q15 | | yes | Rhabdomyosarcoma | Mosaic variegated aneuploidy | | M | Rec | Mis; N; F; S | | | | BUB1B; Bub1A; hBUBR1; O60566; BUB1beta; SSK1; ENSG00000156970; 701; BUBR1; MAD3L |
| C12orf9 | Chromosome 12 open reading frame 9 | 93669 | 12 | 12q14.3 | yes | | Lipoma | | | M | Dom | T | LPP | | | |
| C15orf21 | Chromosome 15 open reading frame 21 | 283651 | 15 | 15q21.1 | yes | | Prostate | | | E | Dom | T | ETV1 | | | |
| C15orf55 | Chromosome 15 open reading frame 55 | 256646 | 15 | 15q14 | yes | | Lethal midline carcinoma | | | E | Dom | T | BRD3; BRD4 | | | 256646; NUT; ENSG00000184507; NUT |
| C16orf75 | Chromosome 16 open reading frame 75 | 116028 | 16 | 16p13.13 | yes | | PMBL; Hodgkin lymphoma | | | L | Dom | T | CIITA | | | 116028; MGC24665; ENSG00000175643; C16orf75; C16orf75 |
| C2orf44 | Chromosome 2 open reading frame 44 | 80304 | 2 | 2p23.3 | yes | | NSCLC | | | E | Dom | T | ALK | | | FLJ21945; PP384; ENSG00000163026; C2orf44; 80304 |

| | | | | | | | | | | | | | | | | |
|----------------|--|--------|----|----------------|-----|--|--|--|--|---|-----|---------|-------|-----|---|--|
| CACNA1D | Calcium channel; voltage-dependent; L type; alpha 1D subunit | 776 | 3 | p14.3 | yes | | Adrenal aldosterone producing adenoma | | | E | Dom | Mis | | yes | Syndrome featuring primary aldosteronism; seizures and neuromuscular disease. | CCHL1A2; CACNA1D; 776; ENSG00000157388; CACH3; CACN4; CACNL1A2; Cav1_3 |
| CALR | Calreticulin | 811 | 19 | p13.3-p13.2 | yes | | MPN; MDS | | | L | Dom | F; Mis | | | | 811; ENSG00000179218; cC1qR; FLJ26680; RO; SSA; P27797; CALR |
| CAMTA1 | Calmodulin binding transcription activator 1 | 23261 | 1 | 1p36.31-p36.23 | yes | | Epithelioid haemangioma | | | M | Dom | T | WWTR1 | | | 23261; ENSG00000171735; KIAA0833; Q9Y6Y1; CAMTA1 |
| CANT1 | Calcium activated nucleotidase 1 | 124583 | 17 | 17q25 | yes | | Prostate | | | E | Dom | T | ETV4 | | | 124583; SCAN-1; SHAPY; Q8WVQ1; ENSG00000171302; CANT1 |
| CARD11 | Caspase recruitment domain family; member 11 | 84433 | 7 | 7p22 | yes | | DLBCL | | | L | Dom | Mis | | | | CARD11; BIMP3; Q9BXL7; MGC133069; CARMA1; ENSG00000198286; 84433 |
| CARS | Cysteinyln-trna synthetase | 833 | 11 | 11p15.5 | yes | | ALCL | | | L | Dom | T | ALK | | | CARS; P49589; ENSG00000110619; 833 |
| CASP8 | Caspase 8; apoptosis-related cysteine peptidase | 841 | 2 | q33-q34 | yes | | Hepatocellular; oral squamous cell; breast | | | E | Rec | N; S; F | | | | ALPS2B; FLICE; MCH5; MACH; CAP4; MGC78473; ENSG00000064012; 841; CASP8 |

| | | | | | | | | | | | | | | | | |
|----------------|--|-------|----|---------|-----|--|----------------------|--|--|---|----------|----------------|---------------|--|--|---|
| CBFA2T1 | Core-binding factor; runt domain; a subunit 2;translocated to; 1 (ETO) | 862 | 8 | 8q22 | yes | | AML | | | L | Dom | T | MLL; RUNX1 | | | RUNX1T1; ENSG00000079102; 862 |
| CBFA2T3 | Core-binding factor; runt domain; a subunit 2; translocated to; 3 (MTG-16) | 863 | 16 | 16q24 | yes | | AML | | | L | Dom | T | RUNX1 | | | CBFA2T3; MTG16; ETO2; MTGR2; ZMYND4; ENSG00000129993; 863 |
| CBFB | Core-binding factor; beta subunit | 865 | 16 | 16q22 | yes | | AML | | | L | Dom | T | MYH11 | | | 865; PEBP2B; Q13951; ENSG00000067955; CBFB |
| CBL | Cas-Br-M (murine) ecotropic retroviral transforming | 867 | 11 | 11q23.3 | yes | | AML; JMML; MDS | | | L | Dom; Rec | T; Mis S; O | MLL | | | CBL; RNF55; CBL2; C- CBL; ENSG00000110395; 867 |
| CBLB | Cas-Br-M (murine) ecotropic retroviral transforming sequence b | 868 | 3 | 3q13.11 | yes | | AML | | | L | Rec | Mis S | | | | Nbla00127; DKFZp686J10223; DKFZp779A0729; DKFZp779F1443; FLJ36865; FLJ41152; RNF56; ENSG00000114423; 868; CBLB |
| CBLC | Cas-Br-M (murine) ecotropic retroviral transforming sequence c | 23624 | 19 | 19q13.2 | yes | | AML | | | L | Rec | M | | | | 23624; CBL-3; CBL- SL; Q9ULV8; ENSG00000142273; CBLC; RNF57 |
| CCDC6 | Coiled-coil domain containing 6 | 8030 | 10 | 10q21 | yes | | NSCLC | | | E | Dom | T | RET | | | 8030; D10S170; PTC; TST1; H4; TPC; Q16204; ENSG00000108091; CCDC6 |

| | | | | | | | | | | | | | | | |
|-----------------|--|-------|----|---------|-----|--|------------------------|--|--|------|-----|---|-------------|--|---|
| CCNB1IP1 | Cyclin B1 interacting protein 1; E3 ubiquitin protein ligase | 57820 | 14 | 14q11.2 | yes | | Leiomyoma | | | M | Dom | T | HMGA2 | | 57820; C14orf18; HEI10; Q9NPC3; ENSG00000100814; CCNB1IP1 |
| CCND1 | Cyclin D ₁ | 595 | 11 | 11q13 | yes | | CLL; B-ALL; breast | | | L; E | Dom | T | IGH@; FSTL3 | | D11S287E; BCL1; U21B31; PRAD1; ENSG00000110092; 595; CCND1 |
| CCND2 | Cyclin D ₂ | 894 | 12 | 12p13 | yes | | NHL; CLL | | | L | Dom | T | IGL@ | | P30279; KIAK0002; MGC102758; CCND2; ENSG00000118971; 894 |
| CCND3 | Cyclin D ₃ | 896 | 6 | 6p21 | yes | | MM | | | L | Dom | T | IGH@ | | CCND3; P30281; ENSG00000112576; 896 |
| CCNE1 | Cyclin E _{1+B89} | 898 | 19 | 19q12 | yes | | Serous ovarian | | | E | Dom | A | | | 898; CCNE; P24864; ENSG00000105173; CCNE1 |
| CD273 | Programmed cell death 1 ligand 2 | 80380 | 9 | 9p24.2 | yes | | PMBL; Hodgkin lymphoma | | | L | Dom | T | CIITA | | bA574F11_2; Q9BQ51; PDL2; PD-L2; MGC142238; CD273; PDCD1L2; Btdc; MGC142240; ENSG00000197646; 80380; PDCD1LG2; B7DC |
| CD274 | CD274 molecule | 29126 | 9 | 9p24 | yes | | PMBL; Hodgkin lymphoma | | | L | Dom | T | CIITA | | CD274; PDL1; B7-H; Q9NZQ7; B7H1; MGC142294; PDCD1LG1; MGC142296; PD-L1; PDCD1L1; ENSG00000120217; 29126 |

| | | | | | | | | | | | | | | | |
|--------------|---|-------|----|----------|-----|-----|-------------------------|---|---|------|-----|--------------|------|--------------------|--|
| CD74 | CD74 molecule; major histocompatibility complex; class II invariant chain | 972 | 5 | 5q32 | yes | | NSCLC | | | E | Dom | T | ROS1 | | 972; ENSG00000019582; DHLA3; HLADG; Ia-GAMMA; protein 41; CD74 |
| CD79A | CD79a molecule; immunoglobulin-associated alpha | 973 | 19 | 19q13.2 | yes | | DLBCL; WM | | | L | Dom | S | | agammaglobulinemia | 973; ENSG00000105369; IGA; MB-1; P11912; CD79A |
| CD79B | CD79b molecule; immunoglobulin-associated beta | 974 | 17 | 17q23 | yes | | DLBCL; WM | | | L | Dom | Mis; S | | agammaglobulinemia | 974; ENSG00000007312; B29; IGB; P40259; CD79B |
| CDC73 | Cell division cycle 73 | 79577 | 1 | 1q21-q31 | yes | yes | Parathyroid adenoma | Parathyroid adenoma; multiple ossifying jaw fibroma | Hyperparathyroidism-jaw tumour syndrome | E; M | Rec | Mis; N; F | | | 79577; HRPT2; C1orf28; FLJ23316; Q6P1J9; HPT-JT; ENSG00000134371; CDC73 |
| CDH1 | Cadherin 1; type 1; E-cadherin (epithelial) (ECAD) | 999 | 16 | 16q22.1 | yes | yes | Lobular breast; gastric | gastric | Familial gastric carcinoma | E | Rec | Mis; N; F; S | | | 999; uvomorulin; ECAD; CD324; LCAM; UVO; Arc-1; CDHE; ENSG0000039068; CDH1; P12830 |
| CDH11 | Cadherin 11; type 2; OB-cadherin (osteoblast) | 1009 | 16 | 16q22.1 | yes | | Aneurysmal bone cyst | | | M | Dom | T | USP6 | | 1009; OB; P55287; CAD11; ENSG00000140937; CDH11 |
| CDK12 | Cyclin-dependent kinase 12 | 51755 | 17 | 17q12 | yes | | Serous ovarian | | | E | Rec | Mis; N; F | | | CRKRS; KIAA0904; Q9NYV4; CRKR; CRK7; ENSG00000167258; CRKRS; 51755 |

| | | | | | | | | | | | | | | | |
|---------------------|--|------|----|----------|-----|-----|---------------------------------------|----------------------|-----------------------------|------------|-----|-----------------|--------|--|---|
| CDK4 | Cyclin-dependent kinase 4 | 1019 | 12 | 12q14 | | yes | | Melanoma | Familial malignant melanoma | E | Dom | Mis | | | MGC14458; PSK-J3; P11802; CMM3; ENSG00000135446; CDK4; 1019 |
| CDK6 | Cyclin-dependent kinase 6 | 1021 | 7 | 7q21-q22 | yes | | ALL | | | L | Dom | T | MLLT10 | | MGC59692; PLSTIRE; ENSG00000105810; Q00534; CDK6; 1021 |
| CDKN2A | Cyclin-dependent kinase inhibitor 2A (p16(INK4a)) gene | 1029 | 9 | 9p21 | yes | yes | Melanoma; multiple other tumour types | Melanoma; pancreatic | Familial malignant melanoma | L; E; M; O | Rec | D; Mis; N; F; S | | | p19; CDK4I; INK4; MLM; p16INK4; p14ARF; INK4a; p16INK4a; MTS1; p16; TP16; ARF; CMM2; p14; ENSG00000147889; P42771; 1029; CDKN2A; CDKN2 |
| CDKN2a (p14) | Cyclin-dependent kinase inhibitor 2A--p14arf protein | 1031 | 1 | 1p32 | yes | | Glioma; MM | | | O; L | Rec | D | | | 1031; P42773; p18-INK4C; p18; INK4C; CDKN2C; ENSG00000123080 |
| CDKN2C | Cyclin-dependent kinase inhibitor 2C (p18; inhibits CDK _s) | 1029 | 9 | 9p21 | yes | yes | Melanoma; multiple other tumour types | Melanoma; pancreatic | Familial malignant melanoma | L; E; M; O | Rec | D; S | | | Q8N726; CDKN2a(p14); 1029; ENSG00000147889; ARF; CDK4I; CDKN2; CMM2; INK4; INK4a; MLM; MTS1; p14; p14ARF; p16; p16INK4; p16INK4a; p19; TP16 |
| CDX2 | Caudal type homeo box transcription factor 2 | 1045 | 13 | 13q12.3 | yes | | AML | | | L | Dom | T | ETV6 | | 1045; CDX3; Q99626; ENSG00000165556; CDX2 |

| | | | | | | | | | | | | | | | |
|---------------|--|-------|----|------------|-----|-----|--|------------------------|--|---|-----|-----------|---|--|---|
| CEBPA | CCAAT/enhancer binding protein (C/EBP); alpha | 1050 | 19 | 19q13.1 | yes | | AML; MDS | | | L | Dom | Mis; N; F | | | CEBPA; CEBP; P49715; C/EBP-alpha; 1050 |
| CEP1 | Centrosomal protein 1 | 11064 | 9 | 9q33 | yes | | MPN; NHL | | | L | Dom | T | FGFR1 | | CEP110; CEP1; ENSG00000119397; 11064; CEP110 |
| CHCHD7 | Coiled-coil-helix-coiled-coil-helix domain containing 7 | 79145 | 8 | 8q11.2 | yes | | salivary gland adenoma | | | E | Dom | T | PLAG1 | | 79145; ENSG00000170791; FLJ40966; MGC2217; Q9BUK0; CHCHD7 |
| CHEK2 | CHK2 checkpoint homolog (S. Pombe) | 11200 | 22 | 22q12.1 | | yes | Breast | Familial breast cancer | | E | Rec | F | | | HuCds1; bA444G7; CDS1; CHK2; LFS2; PP1425; RP11-436C9_1; RAD53; O96017; ENSG00000183765; 11200; CHEK2 |
| CHIC2 | Cysteine-rich hydrophobic domain 2 | 26511 | 4 | 4q11-q12 | yes | | AML | | | L | Dom | T | ETV6 | | 26511; BTL; Q9UKJ5; CHIC2 |
| CHN1 | Chimerin (chimaerin) 1 | 1123 | 2 | 2q31-q32.1 | yes | | Extraskeletal myxoid chondrosarcoma | | | M | Dom | T | TAF15 | | CHN1; ARHGAP2; RHOGAP2; n-chimerin; CHN; RhoGAP2; ENSG00000128656; 1123 |
| CIC | Capicua homolog | 23152 | 19 | 19q13.2 | yes | | Oligodendroglioma; soft tissue sarcoma | | | O | Rec | | | | |
| CIITA | Class II; major histocompatibility complex; transactivator | 4261 | 16 | 16p13 | yes | | PMBL; Hodgkin lymphoma | | | L | Dom | T | FLJ27352; CD274; CD273; RALGDS; RUNDC2A; C16orf75; BCL6 | | 4261; P33076; C2TA; MHC2TA; ENSG00000179583; CIITA |

| | | | | | | | | | | | | | | | | |
|---------------|--|-------|----|--------------|-----|--|---|--|--|------|-----|-----------|-------------|-----|-------------------------|--|
| CLTC | Clathrin; heavy polypeptide (Hc) | 1213 | 17 | 17q11-pter | yes | | ALCL; renal | | | L | Dom | T | ALK; TFE3 | | | Q00610; CLTCL2; ENSG00000141367; 1213; CLTC |
| CLTCL1 | Clathrin; heavy polypeptide-like 1 | 8218 | 22 | 22q11.21 | yes | | ALCL | | | L | Dom | T | ? | | | 8218; CLTCL; P53675; ENSG00000070371; CLTCL1 |
| CMKOR1 | Chemokine orphan receptor 1 | 57007 | 2 | 2q37.3 | yes | | Lipoma | | | M | Dom | T | HMGA2 | | | CMKOR1; GPR159; P25106; RDC1; ENSG00000144476; 57007; CXCR7 |
| CNOT3 | CCR4-NOT transcription complex subunit 3 | 4849 | 19 | 19q13.4 | yes | | T-ALL | | | L | Rec | Mis; N; F | | | | 4849; KIAA0691; LENG2; NOT3; NOT3H; O75175; ENSG00000088038; CNOT3 |
| COL1A1 | Collagen; type I; alpha 1 | 1277 | 17 | 17q21.31-q22 | yes | | Dermatofibrosarcoma protuberans; aneurysmal bone cyst | | | M | Dom | T | PDGFB; USP6 | yes | Osteogenesis imperfecta | COL1A1; P02452; OI4; ENSG00000108821; 1277 |
| COPEB | Core promoter element binding protein (KLF6) | 1316 | 10 | 10p15 | yes | | Prostate; glioma | | | E; O | Rec | Mis; N | | | | DKFZp686N0199; RP11-184A2_1; BCD1; GBF; PAC1; ZF9; COPEB; ZF9; CPBP; ST12; ENSG00000067082; 1316; KLF6 |
| COX6C | Cytochrome c oxidase subunit vic | 1345 | 8 | 8q22-q23 | yes | | Uterine leiomyoma | | | M | Dom | T | HMGA2 | | | COX6C; P09669; ENSG00000164919; 1345 |
| CREB1 | Camp responsive element binding protein 1 | 1385 | 2 | 2q34 | yes | | Clear cell sarcoma; angiomatoid fibrous histiocytoma | | | M | Dom | T | EWSR1 | | | CREB1; ENSG00000118260; 1385 |

| | | | | | | | | | | | | | | | | |
|----------------|--|-------|------|----------------|-----|--|---|--|--|---------|---------|-----------------|--------------------|-----|---------------------------|--|
| CREB3L1 | Camp responsive element binding protein 3-like 1 | 90993 | 11 | 11p11.2 | yes | | Myxofibrosarcoma | | | M | Dom | T | FUS | | | 90993; CREB3L1; ENSG00000157613; OASIS; Q96BA8 |
| CREB3L2 | Camp responsive element binding protein 3-like 2 | 64764 | 7 | 7q34 | yes | | Fibromyxoid sarcoma | | | M | Dom | T | FUS | | | MGC131709; MGC71006; BBF2H7; TCAG_1951439; ENSG00000182158; CREB3L2; 64764 |
| CREBBP | CREB binding protein (CBP) | 1387 | 16 | 16p13.3 | yes | | ALL; AML; DLBCL; B-NHL | | | L | Dom/Rec | T; N; F; Mis; O | MLL; MORF; RUNXBP2 | yes | Rubinstein-Taybi syndrome | 1387; CBP; RTS; RSTS; ENSG0000005339; CREBBP |
| CRLF2 | Cytokine receptor-like factor 2 | 64109 | X; Y | Xp22.3; Yp11.3 | yes | | B-ALL; Downs associated ALL | | | L | Dom | Mis; T | P2RY8; IGH@ | | | CRLF2; ENSG00000205755 |
| CRTC3 | CREB regulated transcription coactivator 3 | 64784 | 15 | 15q26.1 | yes | | Salivary gland mucoepidermoid | | | E | Dom | T | MAML2 | | | 64784; FLJ21868; TORC3; ENSG00000140577; CRTC3 |
| CSF3R | Colony stimulating factor 3 receptor (granulocyte) | 1441 | 1 | 1p35-p34.3 | yes | | aCML; chronic neutrophilic leukaemia | | | L | | | | | | 1441; CD114; GCSFR; ENSG00000119535; CSF3R |
| CTNNB1 | Catenin (cadherin-associated protein); β 1 | 1499 | 3 | 3p22-p21.3 | yes | | Colorectal; ovarian; hepatoblastoma; pleomorphic salivary gland adenoma; other tumour types | | | E; M; O | Dom | H; Mis; T | PLAG1 | | | P35222; CTNNB; ENSG00000168036; 1499; CTNNB1 |

| | | | | | | | | | | | | | | | |
|----------------|---|------|----|---------------|-----|-----|---|---|---------------------------|---|-----|--------------|-------------|--|--|
| CYLD | Familial cylindromatosis gene | 1540 | 16 | 16q12-q13 | yes | yes | Cylindroma | Cylindroma | Familial cylindromatosis | E | Rec | Mis; N; F; S | | | 1540; CYLD1; FLJ20180; EAC; FLJ31664; HSPC057; CDMT; CYLDI; KIAA0849; USPL2; ENSG00000083799; CYLD |
| D10S170 | DNA segment on chromosome 10 (unique) 170; H4 gene (PTC1) | 8030 | 10 | 10q21 | yes | | Papillary thyroid; CML | | | E | Dom | T | RET; PDGFRB | | |
| DAXX | Death-domain associated protein | 1616 | 6 | 6p21.3 | yes | | Pancreatic neuroendocrine tumour; paediatric glioblastoma | | | E | Rec | Mis; F; N | | | MGC126246; BING2; DAP6; DAQB-126H3_2; MGC126245; Q9UER7; ENSG00000206206; 1616; DAXX |
| DDB2 | Damage-specific DNA binding protein 2 | 1643 | 11 | 11p12 | | yes | | Skin basal cell; skin squamous cell; melanoma | Xeroderma pigmentosum (E) | E | Rec | Mis; N | | | DDB2; Q92466; FLJ34321; ENSG00000134574; 1643 |
| DDIT3 | DNA-damage-inducible transcript 3 | 1649 | 12 | 12q13.1-q13.2 | yes | | Liposarcoma | | | M | Dom | T | FUS | | DDIT3; CEBPZ; CHOP; P35638; CHOP10; GADD153; MGC4154; _C/EBP zeta_; ENSG00000175197; 1649 |
| DDX10 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 10 | 1662 | 11 | 11q22-q23 | yes | | AML* | | | L | Dom | T | NUP98 | | 1662; HRH-J8; Q13206; ENSG00000178105; DDX10 |

| | | | | | | | | | | | | | | | |
|---------------|---|-------|----|----------|-----|-----|---|--------------------------|-----------------------------------|---------|-----|----------------------|--------|--|---|
| DDX5 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 5 | 1655 | 17 | 17q21 | yes | | Prostate | | | E | Dom | T | ETV4 | | 1655; HLR1; HUMP68; G17P1; p68; DKFZp686J01190; P17844; ENSG00000108654; DDX5 |
| DDX6 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 6 | 1656 | 11 | 11q23.3 | yes | | B-NHL | | | L | Dom | T | IGH@ | | 1656; P54; FLJ36338; RCK; P26196; HLR2; ENSG00000110367; DDX6 |
| DEK | DEK oncogene (DNA binding) | 7913 | 6 | 6p23 | yes | | AML | | | L | Dom | T | NUP214 | | 7913; D6S231E; P35659; ENSG00000124795; DEK |
| DICER1 | Dicer 1; ribonuclease type III | 23405 | 14 | 14q32.13 | yes | yes | Sex cord-stromal tumour; TGCT; embryonal rhabdomyosarcoma | Pleuropulmonary blastoma | Familial pleuropulmonary blastoma | E; M; O | Rec | Mis F; N | | | 23405; Dicer; Q9UPY3; K12H4_8-LIKE; HERNA; KIAA0928; ENSG00000100697; DICER1 |
| DNM2 | Dynamamin 2 | 1785 | 19 | 19p13.2 | yes | | ETP ALL | | | L | Rec | F; N; Splice; Mis; O | | | 1785; CMTD11; CMTD1B; DYN2; DYN11; ENSG00000079805; DNM2 |
| DNMT3A | DNA (cytosine-5-)-methyltransferase 3 alpha | 1788 | 2 | 2p23 | yes | | AML | | | L | Rec | Mis; F; N; S | | | DNMT3A; Q9Y6K1; M_HsaIIIa; DNMT3A2; 1788; ENSG00000119772 |
| DUX4 | Double homeobox; 4 | 22947 | 4 | 4q35 | yes | | Soft tissue sarcoma | | | M | Dom | T | CIC | | POCJ90; DUX4; POCJ85; POCJ86; POCJ88; POCJ89 |
| EBF1 | Early B-cell factor 1 | 1879 | 5 | 5q34 | yes | | Lipoma | | | M | Dom | T | HMGA2 | | 1879; COE1; EBF; O/E-1; OLF1; Q9UH73; ENSG00000164330; EBF1 |

| | | | | | | | | | | | | | | | |
|---------------|--|--------|----|--------------|-----|-----|-------------------|-------|----------------------|------|-----|----------------------|---------|--|---|
| ECT2L | Epithelial cell transforming sequence 2 oncogene-like | 345930 | 6 | 6q24.1 | yes | | ETP ALL | | | L | Rec | N; Splice; Mis | | | 345930; C6orf91; ENSG00000203734; dJ509I19_2; dJ509I19_3; Q008S8; C6orf91; LFDH |
| EGFR | Epidermal growth factor receptor (erythroblastic leukemia viral (v-erb-b) oncogene homolog; avian) | 1956 | 7 | 7p12.3-p12.1 | yes | yes | Glioma; NSCLC | NSCLC | Familial lung cancer | E; O | Dom | A; O; Mis | | | EGFR; mENA; ERBB; ERBB1; ENSG00000146648; P00533; 1956 |
| EIF4A2 | Eukaryotic translation initiation factor 4A; isoform 2 | 1974 | 3 | 3q27.3 | yes | | NHL | | | L | Dom | T | BCL6 | | 1974; DDX2B; EIF4A; BM-010; EIF4F; ENSG00000156976; EIF4A2 |
| ELF4 | E74-like factor 4 (ets domain transcription factor) | 2000 | X | Xq26 | yes | | AML | | | L | Dom | T | ERG | | 2000; MEF; Q99607; RP3-510O21_2; ELFR; ENSG00000102034; ELF4 |
| ELK4 | ELK4; ETS-domain protein (SRF accessory protein 1) | 2005 | 1 | 1q32 | yes | | prostate | | | E | Dom | T | SLC45A3 | | 2005; SAP1; P28324; ENSG00000158711; ELK4 |
| ELKS | ELKS protein | 23085 | 12 | 12p13.3 | yes | | Papillary thyroid | | | E | Dom | T | RET | | ERC1; KIAA108; Q8IUD2; Cast2; KIAA1081; RAB6IP2; MGC12974; ENSG00000082805; 23085; ELKS |
| ELL | ELL gene (11-19 lysine-rich leukemia gene) | 8178 | 19 | 19p13.1 | yes | | AL | | | L | Dom | T | MLL | | ELL; P55199; Men; C19orf17; ELL1; ENSG00000105656; 8178 |

| | | | | | | | | | | | | | | | | |
|--------------|--|-------|----|---------|-----|--|---|--|--|------|-----|-----------------|--------------|-----|---|---|
| ELN | Elastin | 2006 | 7 | 7q11.23 | yes | | B-ALL | | | L | Dom | T | PAX5 | yes | Supravalvular Aortic Stenosis; Cutis laxa; Williams-Beuren Syndrome | 2006; ENSG00000049540; FLJ38671; FLJ43523; SVAS; WBS; WS; ELN |
| EML4 | Echinoderm microtubule associated protein like 4 | 27436 | 2 | 2p21 | yes | | NSCLC | | | E | Dom | T | ALK | | | EML4; ENSG00000143924; 27436 |
| EP300 | 300 kDa E1A-Binding protein gene | 2033 | 22 | 22q13 | yes | | Colorectal; breast; pancreatic; AML; ALL; DLBCL | | | L; E | Rec | T; N; F; Mis; O | MLL; RUNXBP2 | | | 2033; ENSG00000100393; p300; RP1-85F18_1; EP300 |
| EPS15 | Epidermal growth factor receptor pathway substrate 15 (AF1p) | 2060 | 1 | 1p32 | yes | | ALL | | | L | Dom | T | MLL | | | AF-1P; AF1P; MLLT5; P42566; ENSG00000085832; EPS15; 2060 |
| ERBB2 | V-erb-b2 erythroblastic leukemia viral oncogene homolog 2; neuro/glioblastoma derived oncogene homolog (avian) | 2064 | 17 | 17q21.1 | yes | | Breast; ovarian; other tumour types; NSCLC; gastric | | | E | Dom | A; Mis; O | | | | HER-2; c-erb B2; NEU; TKR1; NGL; HER2; HER-2/neu; c-erbB2; ENSG00000141736; P04626; 2064; ERBB2 |

| | | | | | | | | | | | | | | | | |
|--------------|---|------|----|----------------|--|-----|--|---|---------------------------|---|-----|--------------|--|--|--|---|
| ERCC2 | Excision repair cross-complementing rodent repair deficiency; complementation group 2 (xeroderma pigmentosum D) | 2068 | 19 | 19q13.2-q13.3 | | yes | | Skin basal cell; skin squamous cell; melanoma | Xeroderma pigmentosum (D) | E | Rec | Mis; N; F; S | | | | <p>XPB; TTD; MGC126218; MGC126219; P18074; MAG; COFS2; ENSG00000104884; ERCC2; 2068; MGC102762; EM9</p> |
| ERCC3 | Excision repair cross-complementing rodent repair deficiency; complementation group 3 (xeroderma pigmentosum group B complementing) | 2071 | 2 | 2q21 | | yes | | Skin basal cell; skin squamous cell; melanoma | Xeroderma pigmentosum (B) | E | Rec | Mis; S | | | | <p>2071; RAD25; XPB; BTF2; P19447; TFIIF; GTF2H; ENSG00000163161; ERCC3</p> |
| ERCC4 | Excision repair cross-complementing rodent repair deficiency; complementation group 4 | 2072 | 16 | 16p13.3-p13.13 | | yes | | Skin basal cell; skin squamous cell; melanoma | Xeroderma pigmentosum (F) | E | Rec | Mis; N; F | | | | <p>Q92889; XPF; RAD1; ENSG00000175595; 2072; ERCC4</p> |

| | | | | | | | | | | | | | | |
|--------------|--|------|----|---------|-----|--|---|---------------------------|---------|-----|-----------|---|--|--|
| ERCC5 | Excision repair cross-complementing rodent repair deficiency; complementation group 5 (xeroderma pigmentosum; complementation group G (Cockayne syndrome)) | 2073 | 13 | 13q33 | yes | | Skin basal cell; skin squamous cell; melanoma | Xeroderma pigmentosum (G) | E | Rec | Mis; N; F | | | 2073; XPGC; ERCM2; UVDR; XPG; COFS3; RP11-48416_5; ENSG00000134899; ERCC5 |
| ERG | V-ets erythroblastosis virus E26 oncogene like (avian) | 2078 | 21 | 21q22.3 | yes | | Ewing sarcoma; prostate; AML | | M; E; L | Dom | T | EWSR1; TMPRSS2; ELF4; FUS; HERPUD1; NDRG1 | | ERG; P11308; 2078 |
| ETV1 | Ets variant gene 1 | 2115 | 7 | 7p22 | yes | | Ewing sarcoma; prostate | | M; E | Dom | T | EWSR1; TMPRSS2; SLC45A3; C15orf21; HNRNPA2B1. ACSL3 | | ETV1; DKFZp781L0674; MGC120534; MGC104699; MGC120533; ER81; ENSG0000006468; 2115 |
| ETV4 | Ets variant gene 4 (E1A enhancer binding protein; E1AF) | 2118 | 17 | 17q21 | yes | | Ewing sarcoma; prostate carcinoma | | M; E | Dom | T | EWSR1; TMPRSS2; DDX5; KLK2; CANT1 | | 2118; PEA3; PEAS3; E1A-F; E1AF; ENSG00000175832; ETV4 |
| ETV5 | Ets variant gene 5 | 2119 | 3 | 3q28 | yes | | Prostate | | E | Dom | T | TMPRSS2; SCL45A3 | | 2119; P41161; ERM; ENSG00000244405; ETV5 |

| | | | | | | | | | | | | | | | | |
|--------------|---|------|----|-----------------|-----|-----|---|-------------------------|---------------------------|---------|-----|--------------|--|--|--|---|
| ETV6 | Ets variant gene 6 (TEL oncogene) | 2120 | 12 | 12p13 | yes | | Congenital fibrosarcoma; multiple leukaemia and lymphoma; secretory breast; MDS; ALL | | | L; E; M | Dom | T | NTRK3; RUNX1; PDGFRB; ABL1; MN1; ABL2; FACL6; CHIC2; ARNT; JAK2; EVI1; CDX2; STL; HLXB9; MDS2; PER1; SYK; TTL; FGFR3; PAX5 | | | P41212; TEL/ABL; TEL; ETV6; ENSG00000139083; 2120 |
| EVI1 | Ecotropic viral integration site 1 | 2122 | 3 | 3q26 | yes | | AML; CML | | | L | Dom | T | RUNX1; ETV6; PRDM16; RPN1 | | | EVI1; MDS1-EVI1; PRDM3; Q03112; ENSG00000085276; 2122; EVI1 |
| EWSR1 | Ewing sarcoma breakpoint region 1 (EWS) | 2130 | 22 | 22q12 | yes | | Ewing sarcoma; desmoplastic small round cell tumour; ALL; clear cell sarcoma; sarcoma; myoepithelioma | | | L; M | Dom | T | FLI1; ERG; ZNF278; NR4A3; FEV; ATF1; ETV1; ETV4; WT1; ZNF384; CREB1; POU5F1; PBX1 | | | 2130; EWS; ENSG00000182944; EWSR1 |
| EXT1 | Multiple exostoses type 1 gene | 2131 | 8 | 8q24.1-1-q24.13 | | yes | | Exostoses; osteosarcoma | Multiple exostoses type 1 | M | Rec | Mis; N; F; S | | | | 2131; ttv; Q16394; EXT; ENSG00000182197; EXT1 |
| EXT2 | Multiple exostoses type 2 gene | 2132 | 11 | 11p12-p11 | | yes | | Exostoses; osteosarcoma | Multiple exostoses type 2 | M | Rec | Mis; N; F; S | | | | ENSG00000151348; Q93063; SOTV; 2132; EXT2 |

| | | | | | | | | | | | | | | | |
|---------------|--|-------|----|----------|-----|-----|----------------|--------------------|--|---|------|-----------------|------|--|---|
| EZH2 | Enhancer of zeste homolog 2 | 2146 | 7 | 7q35-q36 | yes | | DLBCL | | | L | Rec? | Mis | | | EZH1; ENX-1; MGC9169; Q15910; ENSG00000106462; EZH2; 2146 |
| EZR | Ezrin | 7430 | 6 | 6q25.3 | yes | | NSCLC | | | E | Dom | T | ROS1 | | 7430; ENSG0000092820; CVL; DKFZp762H157; MGC1584; P15311; CVIL; FLJ26216; EZR |
| FACL6 | Fatty-acid-coenzyme A ligase; long-chain 6 | 23305 | 5 | 5q31 | yes | | AML; AEL | | | L | Dom | T | ETV6 | | 23305; FACL6; LACS2; ACS2; LACS5; KIAA0837; ENSG00000164398; ACSL6 |
| FAM46C | Family with sequence similarity 46; member C | 54855 | 1 | 1p12 | yes | | MM | | | L | Rec | Mis; F; O | | | Q5VWP2; FAM46C; 54855; ENSG00000183508; FLJ20202 |
| FANCA | Fanconi anemia; complementation group A | 2175 | 16 | 16q24.3 | | yes | AML; leukaemia | Fanconi anaemia A | | L | Rec | D; Mis; N; F; S | | | FA1; MGC75158; FANCH; FAH; FA; FA-H; ENSG00000187741; 2175; FANCA; FAA; FACA |
| FANCC | Fanconi anemia; complementation group C | 2176 | 9 | 9q22.3 | | yes | AML; leukaemia | Fanconi anaemia C | | L | Rec | D; Mis; N; F; S | | | FAC; ENSG00000158169; FLJ14675; FACC; FA3; RP11-80I15_2; 2176; FANCC |
| FANCD2 | Fanconi anemia; complementation group D2 | 2177 | 3 | 3p26 | | yes | AML; leukaemia | Fanconi anaemia D2 | | L | Rec | D; Mis; N; F | | | FACD; FANCD; DKFZp762A223; FAD2; FA4; FLJ23826; ENSG00000144554; FANCD2; 2177; FAD; FA-D2 |
| FANCE | Fanconi anemia; complementation group E | 2178 | 6 | 6p21-p22 | | yes | AML; leukaemia | Fanconi anaemia E | | L | Rec | N; F; S | | | FANCE; FACE; FAE; ENSG00000112039; 2178 |

| | | | | | | | | | | | | | | | | |
|---------------|--|-------|----|---------|-----|-----|---|----------------|-------------------|---------|-----|--------------|------------|---|--|---|
| FANCF | Fanconi anemia; complementation group F | 2188 | 11 | 11p15 | | yes | | AML; leukaemia | Fanconi anaemia F | L | Rec | N; F | | | | FANCF; FAF; MGC126856; Q9NPI8; ENSG00000183161; 2188 |
| FANCG | Fanconi anemia; complementation group G | 2189 | 9 | 9p13 | | yes | | AML; leukaemia | Fanconi anaemia G | L | Rec | Mis; N; F; S | | | | FANCG; ENSG00000221829; FAG; XRCC9; O15287; 2189 |
| FAS | Fas cell surface death receptor | 355 | 10 | 10q24.1 | yes | | TGCT; nasal NK/T lymphoma; skin squamous cell carcinoma-burn scar related | | | L; E; O | Rec | Mis | yes | Autoimmune lymphoproliferative syndrome | | FAS; FAS1; APT1; TNFRSF6; ALPS1A; CD95; P25445; APO-1; FASTM; ENSG0000026103; 355 |
| FBXO11 | F-box protein 11 | 80204 | 2 | 2p16.3 | yes | | DLBCL | | | L | Rec | Mis; F; D | | | | FBX11; MGC44383; FLJ12673; PRMT9; UG063H01; Q86XK2; ENSG00000138081; 80204; FBXO11; VIT1 |
| FBXW7 | F-box and WD-40 domain protein 7 (archipelago homolog; Drosophila) | 55294 | 4 | 4q31.3 | yes | | Colorectal; endometrial; T-ALL | | | E; L | Rec | Mis; N; D; F | | | | DKFZp686F23254; AGO; FBX30; FBW7; SEL10; FBXW6; CDC4; SEL-10; FLJ11071; ENSG00000109670; 55294; FBXW7 |
| FCGR2B | Fc fragment of igg; low affinity iib; receptor for (CD32) | 2213 | 1 | 1q23 | yes | | ALL | | | L | Dom | T | ? | | | CD32; FCGR2; IGFR2; CD32B; ENSG00000072694; FCGR2B; 2213; P31994; FCG2 |
| FEV | FEV protein - (HSRNAFEV) | 54738 | 2 | 2q36 | yes | | Ewing sarcoma | | | M | Dom | T | EWSR1; FUS | | | 54738; Pet-1; HSRNAFEV; PET-1; ENSG00000163497; FEV |

| | | | | | | | | | | | | | | | | |
|----------------|-------------------------------------|-------|----|--------------|-----|-----|---------------------------------------|-----------------------|---|------|-----|-----------|------------------------|-----|--|--|
| FGFR1 | Fibroblast growth factor receptor 1 | 2260 | 8 | 8p11.2-p11.1 | yes | | MPN; NHL | | | L | Dom | T | BCR; FOP; ZNF198; CEP1 | yes | Pfeiffer syndrome; Kallman syndrome | 2260; CEK; H4; N-SAM; BFGFR; H2; KAL2; H5; FGFR; FLG; HBGFR; H3; CD331; FLT2; P11362; ENSG00000077782; FGFR1 |
| FGFR1OP | FGFR1 oncogene partner (FOP) | 11116 | 6 | 6q27 | yes | | MPN; NHL | | | L | Dom | T | FGFR1 | | | 11116; FOP; ENSG00000213066; FGFR1OP |
| FGFR2 | Fibroblast growth factor receptor 2 | 2263 | 10 | 10q26 | yes | | Gastric; NSCLC; endometrial | | | E | Dom | Mis | | yes | Crouzon; Pfeiffer; and Apert syndromes | 2263; BFR-1; KGFR; CFD1; K-SAM; CEK3; ECT1; TK25; JWS; CD332; BEK; TK14; ENSG00000066468; FGFR2 |
| FGFR3 | Fibroblast growth factor receptor 3 | 2261 | 4 | 4p16.3 | yes | | Bladder; MM; T-cell lymphoma | | | L; E | Dom | Mis; T | IGH@; ETV6 | yes | Hypochondroplasia; Thanatophoric dysplasia | FGFR3; CD333; CEK2; HSFGR3EX; ACH; JTK4; P22607; ENSG00000068078; 2261 |
| FH | Fumarate hydratase | 2271 | 1 | 1q42.1 | | yes | | Leiomyomatosis; renal | Hereditary leiomyomatosis and renal cell cancer | E; M | Rec | Mis; N; F | | | | 2271; HLRCC; P07954; LRCC; MCL; MCUL1; ENSG00000091483; FH |
| FHIT | Fragile histidine triad gene | 2272 | 3 | 3p14.2 | yes | | Pleomorphic salivary gland adenoma | | | E | Dom | T | HMGA2 | | | P49789; FHIT; 2272; ENSG00000189283; AP3Aase; FRA3B |
| FIP1L1 | FIP1 like 1 (S. Cerevisiae) | 81608 | 4 | 4q12 | yes | | Idiopathic hypereosinophilic syndrome | | | L | Dom | T | PDGFRA | | | 81608; DKFZp586K0717; Q6UN15; ENSG00000145216; FIP1L1 |

| | | | | | | | | | | | | | | | | |
|-----------------|---|--------|----|---------|-----|--|------------------------------------|--|--|---|-----|--------|-------|-----|--|---|
| FLI1 | Friend leukemia virus integration 1 | 2313 | 11 | 11q24 | yes | | Ewing sarcoma | | | M | Dom | T | EWSR1 | | | FLI1; SIC-1; Q01543; EWSR2; ENSG00000151702; 2313 |
| FLJ27352 | BX648577; FLJ27352 hypothetical LOC145788 | 145788 | 15 | 15q21.3 | yes | | PMBL; Hodgkin lymphoma | | | L | Dom | T | CIITA | | | |
| FLT3 | Fms-related tyrosine kinase 3 | 2322 | 13 | 13q12 | yes | | AML; ALL | | | L | Dom | Mis; O | | | | 2322; STK1; RP11-153M24_3; CD135; FLK2; P36888; ENSG00000122025; FLT3 |
| FBNP1 | Formin binding protein 1 (FBP17) | 23048 | 9 | 9q23 | yes | | AML | | | L | Dom | T | MLL | | | SH2D3B; NSP2; KIAA0554; ENSG00000137936; BCAR3; 8412 |
| FOXA1 | Forkhead box A1 | 3169 | 14 | q12-q13 | yes | | Breast; prostate | | | E | Dom | Mis; F | | | | 3169; TCF3A; MGC33105; HNF3A; P55317; ENSG00000129514; FOXA1 |
| FOXL2 | Forkhead box L2 | 668 | 3 | 3q23 | yes | | Granulosa-cell tumour of the ovary | | | O | Dom | Mis | | yes | Blepharophimosis; ptosis and epicanthus inversus Types I; II; Premature ovarian failure type III | 668; BPES; BPES1; PINTO; POF3; PFRK; P58012; ENSG00000183770; FOXL2 |
| FOXO1A | Forkhead box O1A (FKHR) | 2308 | 13 | 13q14.1 | yes | | Alveolar rhabdomyosarcoma | | | M | Dom | T | PAX3 | | | Q12778; FOXO1; FKHR; FKH1; ENSG00000150907; FOXO1A; FOXO1A; 2308 |

| | | | | | | | | | | | | | | | |
|---------------|---|-------|----|---------|-----|--|--|--|--|------|-----|------|---|--|--|
| FOXO3A | Forkhead box O3A | 2309 | 6 | 6q21 | yes | | AL | | | L | Dom | T | MLL | | FOXO2; DKFZp781A0677; FKHRL1P2; AF6q21; O43524; FOXO3A; MGC12739; MGC31925; ENSG00000118689; FOXO3; 2309; FKHRL1 |
| FOXP1 | Forkhead box P1 | 27086 | 3 | 3p14.1 | yes | | ALL | | | L | Dom | T | PAX5 | | 27086; MGC12942; MGC88572; HSPC215; 12CC4; QRF1; FLJ23741; MGC99551; hFKH1B; ENSG00000114861; FOXP1 |
| FSTL3 | Follistatin-like 3 (secreted glycoprotein) | 10272 | 19 | 19p13 | yes | | B-CLL | | | L | Dom | T | CCND1 | | 10272; FLRG; O95633; ENSG0000070404; FSTL3 |
| FUBP1 | Far upstream element (FUSE) binding protein 1 | 8880 | 1 | 1p13.1 | yes | | Oligodendro glioma | | | O | Rec | F; N | | | FUBP; FBP; ENSG00000162613; 8880; FUBP1 |
| FUS | Fusion; derived from t(12;16) malignant liposarcoma | 2521 | 16 | 16p11.2 | yes | | Liposarcoma; AML; Ewing sarcoma; angiomatoid fibrous histiocytoma; fibromyxoid sarcoma | | | M; L | Dom | T | DDIT3; ERG; FEV; ATF1; CREB3L2; CREB3L1 | | 2521; TLS; P35637; FUS1; CHOP; FUS- CHOP; TLS/CHOP; ENSG0000089280; FUS |
| FVT1 | Follicular lymphoma variant translocation 1 | 2531 | 18 | 18q21.3 | yes | | B-NHL | | | L | Dom | T | IGK@ | | 2531; Q06136; FVT1; ENSG00000119537; FVT1 |

| | | | | | | | | | | | | | | | |
|--------------|---|------|----|---------|-----|--|---|--|--|---|-----|---------|-----|-----|---|
| GAS7 | Growth arrest-specific 7 | 8522 | 17 | 17p | yes | | AML* | | | L | Dom | T | MLL | | 8522; KIAA0394; O60861; MLL/GAS7; MGC1348; ENSG0000007237; GAS7 |
| GATA1 | GATA binding protein 1 (globin transcription factor 1) | 2623 | X | Xp11.23 | yes | | Megakaryoblastic leukaemia of Down syndrome | | | L | Dom | Mis; F | | | P15976; ERYF1; GF1; NFE1; ENSG0000102145; GATA1; 2623 |
| GATA2 | GATA binding protein 2 | 2624 | 3 | 3q21.3 | yes | | AML (CML blast transformation) | | | L | Dom | Mis | | | 2624; NFE1B; P23769; MGC2306; ENSG0000179348; GATA2 |
| GATA3 | GATA binding protein 3 | 2625 | 10 | 10p15 | yes | | Breast | | | E | Rec | F; N; S | | yes | HDR syndrome (HYPOPARATHYROIDISM; SENSORINEURAL DEAFNESS; AND RENAL DISEASE) GATA3; HDR; MGC2346; MGC5199; MGC5445; ENSG0000107485; 2625 |
| GMPS | Guanine monophosphate synthetase | 8833 | 3 | 3q24 | yes | | AML | | | L | Dom | T | MLL | | 8833; ENSG0000163655; GMPS |
| GNA11 | Guanine nucleotide binding protein (G protein); alpha 11 (Gq class) | 2767 | 19 | 19p13.3 | yes | | Uveal melanoma | | | E | Dom | Mis | | | GNA11; GNA-11; ENSG0000088256; 2767 |

| | | | | | | | | | | | | | | | |
|---------------|--|-------|----|---------|-----|-----|-------------------|--------------------------------|--|---|-------|--------------------|-----|--|---|
| GNAQ | Guanine nucleotide binding protein (G protein); q polypeptide | 2776 | 9 | 9q21 | yes | | Uveal melanoma | | | E | Dom | Mis | | | 2776; P50148; GAQ; RP11-494N1_1; G-ALPHA-q; ENSG00000156052; GNAQ |
| GNAS | Guanine nucleotide binding protein (G protein); alpha stimulating activity polypeptide 1 | 2778 | 20 | 20q13.2 | yes | | Pituitary adenoma | | | E | Dom | Mis | yes | McCune-Albright syndrome ; pseudohypoparathyroidism; type IA | 2778; RP4-543J19_4; PHP1B; XLalphas; AHO; GSA; PHP1A; XL; MGC33735; XL2; dJ806M20_3_3; Gnas; GPSA; SCG6; dJ309F20_1_1; C20orf45; GNAS1; GNASXL; POH; GSP; NESP; NESP55; ENSG00000087460; GNAS |
| GOLGA5 | Golgi autoantigen; golgin subfamily a; 5 (PTC5) | 9950 | 14 | 14q | yes | | Papillary thyroid | | | E | Dom | T | RET | | 9950; ret-II; Q8TBA6; golgin-84; rfg5; ENSG00000066455; GOLGA5 |
| GOPC | Golgi associated PDZ and coiled-coil motif containing | 57120 | 6 | 6q21 | yes | | Glioblastoma | | | O | Dom | O | | | |
| GPC3 | Glypican 3 | 2719 | X | Xq26.1 | | yes | Wilms tumour | Simpson-Golabi-Behmel syndrome | | O | Rec/X | T; D; Mis; N; F; S | | | 2719; OCI-5; SGBS1; AC002420_1; P51654; SDYS; DGSX; SGB; SGBS; ENSG00000147257; GPC3 |
| GPHN | Gephyrin (GPH) | 10243 | 14 | 14q24 | yes | | AL | | | L | Dom | T | MLL | | 10243; ENSG00000171723; GPHN |

| | | | | | | | | | | | | | | | |
|------------------|--|-------|----|-------------|-----|--|-----------------|--|--|---|-----|---------|--------|--|--|
| GRAF | Gtpase regulator associated with focal adhesion kinase pp125(FAK) | 23092 | 5 | 5q31 | yes | | AML; MDS | | | L | Dom | T; F; S | MLL | | OPHN1L1; KIAA0621; FLJ42530; GRAF; OPHN1L; ENSG00000145819; 23092; ARHGAP26 |
| H3F3A | H3 histone; family 3A | 3020 | 1 | 1q42.1 2 | yes | | Glioma | | | O | Dom | Mis | | | ENSG00000163041; H3F3A; 3020; H3_3A; H3F3; MGC87782; MGC87783; H3_3B; H3F3A; LOC347376; P84243 |
| H3F3B | H3 histone; family 3B (H3.3B) | 3021 | 17 | q25.1 | yes | | Chondroblastoma | | | M | Dom | Mis | | | 3021; H3_3A; H3F3; MGC87782; MGC87783; H3_3B; H3F3A; LOC347376; P84243; ENSG00000132475; H3F3B |
| HCMOG T-1 | Sperm antigen HCMOGT-1 | 92521 | 17 | 17p11.2 | yes | | JMML | | | L | Dom | T | PDGFRB | | SPECC1; FLJ36955; HCMOGT-1; NSP; Q5M775; ENSG00000128487; CYTSB; SPECC1; 92521 |
| HEAB | ATP_GTP binding protein | 10978 | 11 | 11q12 | yes | | AML | | | L | Dom | T | MLL | | 10978; ENSG00000172409; HEAB; Q92989; hClp1; CLP1 |
| HERPUD 1 | Homocysteine-inducible; endoplasmic reticulum stress-inducible; ubiquitin-like domain member 1 | 9709 | 16 | 16q12.2-q13 | yes | | prostate | | | E | Dom | T | ERG | | 9709; ENSG00000051108; HERP; KIAA0025; Mif1; SUP; Q15011; HERPUD1 |

| | | | | | | | | | | | | | | | | |
|-----------------|---|-------|----|---------|-----|--|---|--|--|------|-----|-----|--------|-----|-----------------|--|
| HEY1 | Hairy/enhancer-of-split related with YRPW motif 1 | 23462 | 8 | 8q21 | yes | | Mesenchymal chondrosarcoma | | | M | Dom | T | NCOA2 | | | HESR1; HERP2; OAF1; CHF-2; HRT-1; MGC1274; HESR-1; CHF2; ENSG00000164683; HEY1; 23462 |
| HIP1 | Huntingtin interacting protein 1 | 3092 | 7 | 7q11.23 | yes | | CMML | | | L | Dom | T | PDGFRB | | | 3092; ILWEQ; ENSG00000127946; HIP1 |
| HIST1H3B | Histone cluster 1; h3b | 3020 | 6 | 6p22.1 | yes | | Glioma | | | O | Dom | Mis | | | | H3_1; HIST1H3B; 8358; ENSG00000124693; H3/A; H3FA; H3/I; H3FL; H3/c; H3FC; H3/b; H3FB; H3/d; H3FD; H3/i; H3FI; H3/h; H3FH; H3/k; H3F1K; H3FK; H3_f; H3/f; H3FF; H3/j; H3FJ; P68431 |
| HIST1H4I | Histone 1; H4i (H4FM) | 8294 | 6 | 6p21.3 | yes | | NHL | | | L | Dom | T | BCL6 | | | 8294; HIST4H4; MGC24116; P62805; HIST1H4I |
| HLF | Hepatic leukemia factor | 3131 | 17 | 17q22 | yes | | ALL | | | L | Dom | T | TCF3 | | | 3131; Q16534; ENSG00000108924; HLF |
| HLXB9 | Homeo box HB9 | 3110 | 7 | 7q36 | yes | | AML | | | L | Dom | T | ETV6 | yes | CURRANOSYNDROME | 3110; HB9; HLXB9; P50219; ENSG00000130675; HLXB9 |
| HMGAI | High mobility group AT-hook 1 | 3159 | 6 | 6p21 | yes | | Microfollicular thyroid adenoma; various benign mesenchymal tumours | | | E; M | Dom | T | ? | | | HMGAI; MGC4242; HMG-R; MGC4854; P17096; HMG1Y; MGC12816; ENSG00000137309; 3159 |

| | | | | | | | | | | | | | | | |
|------------------|---|-------|----|------------|-----|--|---|--|--|---|-----|---|--|--|---|
| HMG2 | High mobility group AT-hook 2 (HMGIC) | 8091 | 12 | 12q15 | yes | | Lipoma; leiomyoma; pleomorphic salivary gland adenoma | | | M | Dom | T | LHFP; RAD51L1; LPP; COX6C; CMKOR1; NFIB; ALDH2; CCNB1IP1; EBF1; WIF1; FHIT | | 8091; HMGIC; BABL; HMGIC; LIPO; ENSG00000149948; HMG2 |
| HNRNPA2B1 | Heterogeneous nuclear ribonucleoprotein A2/B1 | 3181 | 7 | 7p15 | yes | | Prostate | | | E | Dom | T | ETV1 | | HNRNPA2B1; ENSG00000122566; 3181; HNRNPA2; HNRNPB1; HNRPB1; RNPA2; SNRPB1; HNRPA2 |
| HOOK3 | Hook homolog 3 | 84376 | 8 | 8p11.21 | yes | | Papillary thyroid | | | E | Dom | T | RET | | 84376; ENSG00000168172; HK3; Q86VS8; HOOK3 |
| HOXA11 | Homeo box A11 | 3207 | 7 | 7p15-p14.2 | yes | | CML | | | L | Dom | T | NUP98 | | HOXA11; HOX1; P31270; HOX1I; ENSG00000005073; 3207 |
| HOXA13 | Homeo box A13 | 3209 | 7 | 7p15-p14.2 | yes | | AML | | | L | Dom | T | NUP98 | | HOX1; P31271; HOX1J; ENSG00000106031; 3209; HOXA13 |
| HOXA9 | Homeo box A9 | 3205 | 7 | 7p15-p14.2 | yes | | AML* | | | L | Dom | T | NUP98; MSI2 | | HOXA9; HOX1; P31269; HOX1G; ENSG00000078399; 3205 |
| HOXC11 | Homeo box C11 | 3227 | 12 | 12q13.3 | yes | | AML | | | L | Dom | T | NUP98 | | 3227; HOX3H; O43248; ENSG00000123388; HOXC11 |
| HOXC13 | Homeo box C13 | 3229 | 12 | 12q13.3 | yes | | AML | | | L | Dom | T | NUP98 | | 3229; HOX3G; HOX3; P31276; ENSG00000123364; HOXC13 |
| HOXD11 | Homeo box D11 | 3237 | 2 | 2q31-q32 | yes | | AML | | | L | Dom | T | NUP98 | | 3237; ENSG00000128713; HOXD11 |
| HOXD13 | Homeo box D13 | 3239 | 2 | 2q31-q32 | yes | | AML* | | | L | Dom | T | NUP98 | | 3239; SPD; HOX4I; P35453; HOXD13 |

| | | | | | | | | | | | | | | | |
|--------------|--|------|----|--------------|-----|-----|--|---|----------------------|---------|-----|-----|------|--|---|
| HRAS | V-Ha-ras Harvey rat sarcoma viral oncogene homolog | 3265 | 11 | 11p15. 5 | yes | yes | Infrequent sarcomas; rare other tumour types | Rhabdomyosar coma; ganglioneurobl astoma; bladder | Costello syndrome | E; L; M | Dom | Mis | | | HRAS; K-ras; N-ras; P01112; c-bas/has; RASH1; HRAS1; ENSG00000174775; 3265 |
| HSPCA | Heat shock 90 kDa protein 1; α | 3320 | 14 | 14q32. 31 | yes | | NHL | | | L | Dom | T | BCL6 | | 3320; FLJ31884; HSP86; Hsp89; Hsp90; HSP90A; HSP90N; HSPC1; HSPCA; HSPCAL1; HSPCAL4; HSPN; LAP2; P07900; ENSG00000080824; HSP90AA1 |
| HSPCB | Heat shock 90 kDa protein 1; β | 3326 | 6 | 6p12 | yes | | NHL | | | L | Dom | T | BCL6 | | 3326; HSPCB; FLJ26984; HSPC2; D6S182; P08238; HSP90-BETA; HSP90B; ENSG00000096384; HSP90AB1 |
| IDH1 | Isocitrate dehydrogenase 1 (NADP ⁺); soluble | 3417 | 2 | 2q33.3 | yes | | Glioblastom a | | | O | Dom | Mis | | | IDH1; IDP; O75874; PICD; IDH; ENSG00000138413; 3417 |
| IDH2 | Socitrate dehydrogenase 2 (NADP ⁺); mitochondrial | 3418 | 15 | 15q26. 1 | yes | | Glioblastom a | | | M | Dom | M | | | ICD-M; P48735; IDP; IDH; mNADP-IDH; ENSG00000182054; IDHM; IDH2; 3418 |

| | | | | | | | | | | | | | | | | |
|--------------|-----------------------------|-------|----|---------------|-----|--|--|--|--|---|----------|------|--|--|--|--|
| IGH@ | Immunoglobulin heavy locus | 3492 | 14 | 14q32.33 | yes | | MM; Burkitt lymphoma; NHL; CLL; B-ALL; MALT; MLCLS | | | L | Dom | T | MYC; FGFR3; PAX5; IRTA1; IRF4; CCND1; BCL9; BCL8; BCL6; BCL2; BCL3; BCL10; BCL11A. LHX4; DDX6; NFKB2; PAFAH1B2; PCSK7; CRLF2 | | | |
| IGK@ | Immunoglobulin kappa locus | 50802 | 2 | 2p12 | yes | | Burkitt lymphoma; B-NHL | | | L | Dom | T | MYC; FVT1 | | | |
| IGL@ | Immunoglobulin lambda locus | 3535 | 22 | 22q11.1-q11.2 | yes | | Burkitt lymphoma | | | L | Dom | T | BCL9; MYC; CCND2 | | | |
| IKZF1 | IKAROS family zinc finger 1 | 10320 | 7 | 7p12.2 | yes | | ALL; DLBCL | | | L | Rec; Dom | D; T | BCL6 | | | Q13422; LyF-1; IKAROS; ZNFN1A1; Hs_54452; ENSG00000185811; 10320; IKZF1; hlk-1 |
| IL2 | Interleukin 2 | 3558 | 4 | 4q26-q27 | yes | | Intestinal T-cell lymphoma | | | L | Dom | T | TNFRSF17 | | | 3558; IL-2; P60568; ENSG00000109471; IL2 |
| IL21R | Interleukin 21 receptor | 50615 | 16 | 16p11 | yes | | NHL | | | L | Dom | T | BCL6 | | | IL21R; Q9HBE5; ENSG00000103522; 50615 |

| | | | | | | | | | | | | | | | |
|--------------|--|-------|----|--------------|-----|--|---|--|--|---|-----|-----------|-----------------|-----|---|
| IL6ST | Interleukin 6 signal transducer (gp130; oncostatin M receptor) | 3572 | 5 | 5q11 | yes | | Hepatocellular carcinoma | | | E | Dom | O | | | GP130; CDw130; CD130; GP130-RAPS; IL6R-beta; P40189; ENSG00000134352; IL6ST; 3572 |
| IL7R | Interleukin 7 receptor | 3575 | 5 | 5p13 | yes | | ALL; ETP ALL | | | L | Dom | Mis; O | | yes | Severe combined immunodeficiency ENSG00000168685; IL7R; 3575; CD127; CDW127; IL-7R-alpha; P16871 |
| IRF4 | Interferon regulatory factor 4 | 3662 | 6 | 6p25-p23 | yes | | MM | | | L | Dom | T | IGH@ | | 3662; LSIRF; Q15306; MUM1; ENSG00000137265; IRF4 |
| IRTA1 | Immunoglobulin superfamily receptor translocation associated 1 | 83417 | 1 | 1q21 | yes | | B-NHL | | | L | Dom | T | IGH@ | | 83417; FCRH4; IGFP2; IRTA1; ENSG00000163518; FCRL4 |
| ITK | IL2-inducible T-cell kinase | 3702 | 5 | 5q31-q32 | yes | | Peripheral T-cell lymphoma | | | L | Dom | T | SYK | | 3702; PSCTK2; MGC126257; LYK; MGC126258; EMT; ENSG00000113263; Q08881; ITK |
| JAK1 | Janus kinase 1 | 3716 | 1 | 1p32.3-p31.3 | yes | | ALL | | | L | Dom | Mis | | | JAK1A; JAK1_ENST00000342505; 3716; ENSG00000162434; JAK1B; JTK3; P23458 |
| JAK2 | Janus kinase 2 | 3717 | 9 | 9p24 | yes | | ALL; AML; MPN; CML | | | L | Dom | T; Mis; O | ETV6; PCM1; BCR | | O60674; JAK2_ENST00000381652; 3717; ENSG0000096968; JTK10 |
| JAK3 | Janus kinase 3 | 3718 | 19 | 19p13.1 | yes | | Acute megakaryocytic leukaemia; ETP ALL | | | L | Dom | Mis | | | 3718; L-JAK; JAK3_HUMAN; LJAK; JAK-3; JAKL; ENSG00000105639; P52333; JAK3 |

| | | | | | | | | | | | | | | | | |
|-----------------|--|--------|----|----------------|-----|-----|----------------------------|---------|--------------------------------------|------|-----|------------|-------|-----|------------------|---|
| JAZF1 | Juxtaposed with another zinc finger gene 1 | 221895 | 7 | 7p15.2-p15.1 | yes | | Endometrial stromal tumour | | | M | Dom | T | SUZ12 | | | 221895; Q86VZ6; ENSG00000153814; JAZF1 |
| JUN | Jun oncogene | 3725 | 1 | 1p32-p31 | yes | | Sarcoma | | | M | Dom | A | | | | JUN; P05412; c-Jun; AP1; ENSG00000177606; 3725 |
| KCNJ5 | Potassium inwardly-rectifying channel; subfamily J; member 5 | 3762 | 11 | 11q24 | yes | yes | Adrenal adenoma | Adrenal | Familial hyperaldosteronism type III | E | Dom | Mis | | yes | Long QT syndrome | 3762; ENSG00000120457; CIR; GIRK4; KATP1; KIR3_4; P48544; KCNJ5 |
| KDM5A | Lysine (K)-specific demethylase 5A; JARID1A | 5927 | 12 | 12p11 | yes | | AML | | | L | Dom | T | NUP98 | | | 5927; RBBP2; RBP2; JARID1A; ENSG00000073614; JARID1A |
| KDM5C | Lysine (K)-specific demethylase 5C (JARID1C) | 8242 | X | Xp11.22-p11.21 | yes | | Clear cell renal carcinoma | | | E | Rec | N; F; S | | | | SMCX; XE169; RP11-258C19_2; MRXJ; MRXSJ; DXS1272E; ENSG00000126012; SMCX; 8242; JARID1C |
| KDM6A | Lysine (K)-specific demethylase 6A; UTX | 7403 | X | Xp11.2 | yes | | Renal; oesophageal SCC; MM | | | E; L | Rec | D; N; F; S | | | | UTX; O15550; bA386N14_2; MGC141941; RP13-886N14_3; DKFZp686A03225; 7403; ENSG00000147050; UTX |
| KDR | Vascular endothelial growth factor receptor 2 | 3791 | 4 | 4q11-q12 | yes | | NSCLC; angiosarcoma | | | E | Dom | Mis | | | | 3791; VEGFR2; FLK1; CD309; VEGFR; P35968; KDR; ENSG00000128052 |
| KIAA1549 | Kiaa1549 | 57670 | 7 | 7q34 | yes | | Pilocytic astrocytoma | | | O | Dom | O | BRAF | | | 57670; ENSG00000122778; KIAA1549 |

| | | | | | | | | | | | | | | | |
|--------------|---|------|----|------------|-----|-----|--|-------------------|--|------------|-----|-----------|------------|-----|--|
| KIF5B | Kinesin family member 5B | 3799 | 10 | 10p11.22 | yes | | NSCLC | | | E | Dom | T | RET; ALK | | 3799; ENSG00000170759; KINH; KNS; KNS1; UKHC; P33176; KIF5B |
| KIT | V-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog | 3815 | 4 | 4q12 | yes | yes | GIST; AML; TGCT; mastocytosis ; mucosal melanoma | GIST; epithelioma | Familial gastrointestinal stromal tumour | L; M; O; E | Dom | Mis; O | | yes | Piebald trait 3815; C-Kit; P10721; SCFR; CD117; ENSG00000157404; KIT |
| KLF4 | Kruppel-like factor 4 | 9314 | 9 | 9q31 | yes | | Meningioma | | | O | Dom | Mis | | | KLF4; EZF; O43474; GKLF; ENSG00000136826; 9314 |
| KLK2 | Kallikrein-related peptidase 2 | 3817 | 19 | 19q13.41 | yes | | Prostate | | | E | Dom | T | ETV4 | | KLK2; P20151; KLK2A2; hK2; MGC12201; ENSG00000167751; 3817 |
| KMT2D | Lysine (K)-specific methyltransferase 2D | 8085 | 12 | 12q13.12 | yes | | Medulloblastoma; renal | | | O; E | Rec | N; F; Mis | | | KMT2D; ENSG00000167548; MLL2; 8085 |
| KRAS | V-Ki-ras2 Kirsten rat sarcoma 2 viral oncogene homolog | 3845 | 12 | 12p12.1 | yes | | Pancreatic; colorectal; lung; thyroid; AML; other tumour types | | | L; E; M; O | Dom | Mis | | | K-RAS2B; C-K-RAS; RASK2; KRAS1; K-RAS4B; K-RAS2A; K-RAS4A; KRAS2; KIRAS; NS3; P01116; 3845; KRAS |
| KTN1 | Kinectin 1 (kinesin receptor) | 3895 | 14 | 14q22.1 | yes | | Papillary thyroid | | | E | Dom | T | RET | | KTN1; Q86UP2; CG1; KIAA0004; ENSG00000126777; 3895 |
| LAF4 | Lymphoid nuclear protein related to AF4 | 3899 | 2 | 2q11.2-q12 | yes | | ALL; T-ALL | | | L | Dom | T | MLL; RUNX1 | | MLL2-like; P51826; LAF4; ENSG00000144218; AFF3; 3899 |

| | | | | | | | | | | | | | | | |
|--------------|--|-------|----|---------------|-----|-----|----------------------|---------------|--|---|-----|------|-------|--|---|
| LASP1 | LIM and SH3 protein 1 | 3927 | 17 | 17q11-q21.3 | yes | | AML | | | L | Dom | T | MLL | | 3927; ENSG00000002834; Lasp-1; MLN50; Q14847; LASP1 |
| LCK | Lymphocyte-specific protein tyrosine kinase | 3932 | 1 | 1p35-p34.3 | yes | | T-ALL | | | L | Dom | T | TRB@ | | 3932; YT16; pp58lck; p56lck; ENSG00000182866; P06239; LCK |
| LCPI | Lymphocyte cytosolic protein 1 (L-plastin) | 3936 | 13 | 13q14.1-q14.3 | yes | | NHL | | | L | Dom | T | BCL6 | | LCPI; CP64; LC64P; PLS2; FLJ26114; P13796; FLJ25423; L-PLASTIN; DKFZp781A23186; FLJ39956; ENSG00000136167; 3936 |
| LCX | Leukemia-associated protein with a CXXC domain | 80312 | 10 | 10q21 | yes | | AML | | | L | Dom | T | MLL | | 80312; KIAA1676; LCX; Q8NFU7; TET1; bA119F7_1; CXXC6; ENSG00000138336; CXXC6 |
| LHFP | Lipoma HMGIC fusion partner | 10186 | 13 | 13q12 | yes | | Lipoma | | | M | Dom | T | HMGA2 | | 10186; MGC22429; ENSG00000183722; LHFP |
| LIFR | Leukemia inhibitory factor receptor | 3977 | 5 | 5p13-p12 | yes | | Salivary adenoma | | | E | Dom | T | PLAG1 | | LIFR; SJS2; CD118; STWS; SWS; 3977; ENSG00000113594 |
| LMO1 | LIM domain only 1 (rhombotin 1) (RBTN1) | 4004 | 11 | 11p15 | yes | yes | T-ALL; neuroblastoma | Neuroblastoma | | L | Dom | T; A | TRD@ | | P25800; RBTN1; TTG1; RHOM1; ENSG00000166407; LMO1; 4004 |
| LMO2 | LIM domain only 2 (rhombotin-like 1) (RBTN2) | 4005 | 11 | 11p13 | yes | | T-ALL | | | L | Dom | T | TRD@ | | LMO2; RBTN2; RHOM2; RBTN1; TTG2; P25791; ENSG00000135363; 4005 |

| | | | | | | | | | | | | | | | |
|---------------|---|--------|----|---------------|-----|-----|--|------------------------|--------------------|------|-----|--------------|---------------------|--|--|
| LPP | LIM domain containing preferred translocation partner in lipoma | 4026 | 3 | 3q28 | yes | | Lipoma; leukaemia | | | L; M | Dom | T | HMGA2; MLL; C12orf9 | | 4026; Q93052; ENSG00000145012; LPP |
| LRIG3 | Leucine-rich repeats and immunoglobulin-like domains 3 | 121227 | 12 | 12q14.1 | yes | | NSCLC | | | E | Dom | T | ROS1 | | Q6UXM1; FLJ26573; KIAA3016; FLJ90440; ENSG00000139263; LRIG3; 121227 |
| LYL1 | Lymphoblastic leukemia derived sequence 1 | 4066 | 19 | 19p13.2-p13.1 | yes | | T-ALL | | | L | Dom | T | TRB@ | | LYL1; P12980; ENSG00000104903; 4066 |
| MADH4 | Homolog of Drosophila Mothers Against Decapentaplegic 4 gene | 4089 | 18 | 18q21.1 | yes | yes | Colorectal; pancreatic; small intestine | Gastrointestinal polyp | Juvenile polyposis | E | Rec | D; Mis; N; F | | | Q13485; JIP; DPC4; MADH4; ENSG00000141646; 4089; SMAD4 |
| MAF | V-maf musculoaponeurotic fibrosarcoma oncogene homolog | 4094 | 16 | 16q22-q23 | yes | | MM | | | L | Dom | T | IGH@ | | MAF; MGC71685; 4094; ENSG00000178573 |
| MAFB | V-maf musculoaponeurotic fibrosarcoma oncogene homolog B (avian) | 9935 | 20 | 20q11.2-q13.1 | yes | | MM | | | L | Dom | T | IGH@ | | 9935; Q9Y5Q3; KRML; MGC43127; ENSG00000204103; MAFB |
| MALAT1 | Metastasis associated lung adenocarcinoma transcript 1 (lnc-RNA; non-protein coding) | 378938 | 11 | 11q31.1 | yes | | Renal cell carcinoma (childhood epithelioid); lung | | | E | Dom | T | TFEB | | MALAT1; Q9UHZ2; 378938; PRO1073 |

| | | | | | | | | | | | | | | | |
|---------------|---|-------|----|----------------|-----|-----|---|------------------|--|------|-----|-----------|----------------|-------------------------------|---|
| MALT1 | Mucosa associated lymphoid tissue lymphoma translocation gene 1 | 10892 | 18 | 18q21 | yes | | MALT | | | L | Dom | T | BIRC3 | | MALT1; ENSG00000172175; 10892 |
| MAML2 | Mastermind-like 2 (Drosophila) | 84441 | 11 | 11q22-q23 | yes | | Salivary gland mucoepidermoid | | | E | Dom | T | MECT1; CRT3 | | MAM2; MAM3; DKFZp686N0150; KIAA1819; MLL- MAML2; Q8IZL2; MAM-3; ENSG00000184384; 84441; MAML2 |
| MAP2K1 | Mitogen-activated protein kinase kinase 1 | 5604 | 15 | 15q22.1-q22.33 | yes | | NSCLC; melanoma; colorectal | | | E | Dom | Mis | | Cardiofaciocutaneous syndrome | 5604; PRKMK1; MKK1; MEK1; Q02750; ENSG00000169032; MAP2K1; MAPKK1 |
| MAP2K2 | Mitogen-activated protein kinase kinase 2 | 5605 | 19 | 19p13.3 | yes | | NSCLC; melanoma | | | E | Dom | Mis | | Cardiofaciocutaneous syndrome | MAP2K2; MEK2; PRKMK2; MAPKK2; MKK2; ENSG00000126934; P36507; 5605 |
| MAP2K4 | Mitogen-activated protein kinase kinase 4 | 6416 | 17 | 17p11.2 | yes | | Pancreatic; breast; colorectal | | | E | Rec | D; Mis; N | | | SERK1; MEK4; SEK1; JNKK; MAPKK4; PRKMK4; MKK4; JNKK1; ENSG00000065559; P45985; MAP2K4; 6416 |
| MAX | Myc associated factor X | 4149 | 14 | 14q23 | yes | yes | Pheochromocytoma; endometrioid carcinoma; colon carcinoma | Pheochromocytoma | | E; O | Rec | Mis; N; F | | | 4149; MGC36767; MGC34679; orf1; MGC11225; P61244; MGC10775; ENSG00000125952; MGC18164; MAX |

| | | | | | | | | | | | | | | | |
|--------------|--|--------|----|-------|-----|-----|---|--|-------------------------------------|------------|-----|-----------------|-------|-----|--|
| MDM2 | Mdm2 p53 binding protein homolog | 4193 | 12 | 12q15 | yes | | Sarcoma; glioma; colorectal; other tumour types | | | M; O; E; L | Dom | A | | | 4193; HDM2; Q00987; hdm2; MGC71221; HDMX; ENSG00000135679; MDM2 |
| MDM4 | Mdm4 p53 binding protein homolog | 4194 | 1 | 1q32 | yes | | Glioblastoma; bladder; retinoblastoma | | | M | Dom | A | | | MDM4; DKFZp781B1423; MGC132766; MRP1; MDMX; RP11-430C7_1; ENSG00000198625; 4194 |
| MDS1 | Myelodysplasia syndrome 1 | 2122 | 3 | 3q26 | yes | | MDS; AML | | | L | Dom | T | RUNX1 | | 4197; MDS1-EV11; Q13465; PRDM3; MDS1 |
| MDS2 | Myelodysplastic syndrome 2 | 259283 | 1 | 1p36 | yes | | MDS | | | L | Dom | T | ETV6 | | MDS2; Q8NDY4; ENSG00000197880; 259283 |
| MECT1 | Mucoepidermoid translocated 1 | 23373 | 19 | 19p13 | yes | | Salivary gland mucoepidermoid | | | E | Dom | T | MAML2 | | 23373; Q6UUV9; FLJ14027; WAMTP1; MECT1; TORC1; KIAA0616; ENSG00000105662; CRTC1 |
| MED12 | Mediator complex subunit 12 | 9968 | X | Xq13 | yes | | Uterine leiomyoma | | | M | Dom | M; S | | Yes | Opitz-Kaveggia Syndrome Q93074; MED12_ENST00000374080; 9968; ARC240; CAGH45; FGS1; HOPA; OKS; OPA1; TNRC11; TRAP230; KIAA0192 |
| MEN1 | Multiple endocrine neoplasia type 1 gene | 4221 | 11 | 11q13 | yes | yes | Parathyroid tumours; pancreatic neuroendocrine tumour | Parathyroid adenoma; pituitary adenoma; pancreatic islet cell; carcinoid | Multiple endocrine neoplasia type 1 | E | Rec | D; Mis; N; F; S | | | MEN1; ENSG00000133895; 4221 |

| | | | | | | | | | | | | | | | |
|-------------|--|-------|----|--------|-----|-----|--|---------------------------------------|---|------|-----|-----------------|-----|---|---|
| MET | Met proto-oncogene (hepatocyte growth factor receptor) | 4233 | 7 | 7q31 | yes | | Papillary renal; head-neck squamous cell | Papillary renal | Familial papillary renal cancer | E | Dom | Mis | | | 4233; RCCP2; AUTS9; HGFR; P08581; ENSG00000105976; MET |
| MITF | Microphthalmia-associated transcription factor | 4286 | 3 | 3p14.1 | yes | | Melanoma | | | E | Dom | A | yes | Waardenburg syndrome type 2; Tietz syndrome | WS2A; MITF; 4286; ENSG00000187098 |
| MKL1 | Megakaryoblastic leukemia (translocation) 1 | 57591 | 22 | 22q13 | yes | | Acute megakaryocytic leukaemia | | | L | Dom | T | | RBM15 | 57591; BSAC; MAL; MRTF-A; Q969V6; ENSG00000196588; MKL1 |
| MLF1 | Myeloid leukemia factor 1 | 4291 | 3 | 3q25.1 | yes | | AML | | | L | Dom | T | | NPM1 | MLF1; P58340; ENSG00000178053; 4291 |
| MLH1 | E.coli mutl homolog gene | 4292 | 3 | 3p21.3 | yes | yes | Colorectal; endometrial; ovarian; CNS | Colorectal; endometrial; ovarian; CNS | Hereditary non-polyposis colorectal cancer; Turcot syndrome | E; O | Rec | D; Mis; N; F; S | | | FCC2; COCA2; HNPCC; MGC5172; P40692; HNPCC2; hMLH1; ENSG00000076242; 4292; MLH1 |

| | | | | | | | | | | | | | | | | |
|-------------|--|-------|----|--------|-----|--|-----------------|--|--|---|-----|------|---|--|--|---|
| MLL | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog; Drosophila) | 4297 | 11 | 11q23 | yes | | AML; ALL | | | L | Dom | T; O | MLL; MLLT1; MLLT2; MLLT3; MLLT4; MLLT7; MLLT10; MLLT6; ELL; EPS15; AF1Q; CREBBP; SH3GL1; FNBP1; PNUTL1; MSF; GPHN; GMPS; SSH3BP1; ARHGGEF12 ; GAS7; FOXO3A; LAF4; LCX; SEPT6; LPP; CBFA2T1; GRAF; EP300; PICALM; HEAB | | | TRX1; CXXC7; MLL1A; HRX; HTRX1; MLL/GAS7; ENSG00000118058; MLL; 4297; ALL-1 |
| MLL3 | Myeloid/lymphoid or mixed-lineage leukemia 3 | 58508 | 7 | 7q36.1 | yes | | Medulloblastoma | | | O | Rec | N | | | | MLL3; 58508; ENSG00000055609 |

| | | | | | | | | | | | | | | | |
|---------------|--|------|----|---------|-----|--|-----|--|--|---|-----|---|-------------------|--|--|
| MLLT1 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog; Drosophila); translocated to; 1 (ENL) | 4298 | 19 | 19p13.3 | yes | | AL | | | L | Dom | T | MLL | | Q03111; ENL; LTG19; YEATS1; ENSG00000130382; MLLT1; 4298 |
| MLLT10 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog; Drosophila); translocated to; 10 (AF10) | 8028 | 10 | 10p12 | yes | | AL | | | L | Dom | T | MLL; PICALM; CDK6 | | 8028; P55197; AF10; ENSG00000078403; MLLT10 |
| MLLT2 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog; Drosophila); translocated to; 2 (AF4) | 4299 | 4 | 4q21 | yes | | AL | | | L | Dom | T | MLL | | 4299; MLLT2; PBM1; AF-4; P51825; ENSG00000172493; AFF1 |
| MLLT3 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog; Drosophila); translocated to; 3 (AF9) | 4300 | 9 | 9p22 | yes | | ALL | | | L | Dom | T | MLL | | AF9; AF-9; YEATS3; P42568; ENSG00000171843; MLLT3; 4300 |

| | | | | | | | | | | | | | | | |
|--------------|---|------|----|--------|-----|--|-----------------|--|--|------|-----|---|------|--|--|
| MLLT4 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog; Drosophila); translocated to; 4 (AF6) | 4301 | 6 | 6q27 | yes | | AL | | | L | Dom | T | | | |
| MLLT6 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog; Drosophila); translocated to; 6 (AF17) | 4302 | 17 | 17q21 | yes | | AL | | | L | Dom | T | MLL | | 4302; P55198; AF17; ENSG00000108292; MLLT6 |
| MLLT7 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog; Drosophila); translocated to; 7 (AFX1) | 4303 | X | Xq13.1 | yes | | AL | | | L | Dom | T | MLL | | 4303; P98177; MLLT7; AFX1; ENSG00000184481; MLLT7 |
| MN1 | Meningioma (disrupted in balanced translocation) 1 | 4330 | 22 | 22q13 | yes | | AML; meningioma | | | L; O | Dom | T | ETV6 | | Q10571; MN1; 4330; ENSG00000169184; dJ353E16_2; MGCR; MGCR1; MGCR1-PEN |

| | | | | | | | | | | | | | | | | |
|--------------|---|--------|----|------------|-----|-----|----------------------------------|----------------------------------|--|---|-----|-----------------|-------|-----|---|--|
| MPL | Myeloproliferative leukemia virus oncogene; thrombopoietin receptor | 4352 | 1 | p34 | yes | yes | MPN | MPN | Familial essential thrombocythemia | L | Dom | Mis | | yes | congenital amegakaryocytic thrombocytopenia | P40238; TPOR; RP1-92O14_1; C-MPL; MPLV; CD110; ENSG00000117400; MPL; 4352 |
| MSF | MLL septin-like fusion | 10801 | 17 | 17q25 | yes | | AML* | | | L | Dom | T | MLL | | | NAPB; PNUTL4; SINT1; SeptD1; MSF; AF17q25; KIAA0991; MSF1; SEPT9; ENSG00000184640; 10801 |
| MSH2 | Muts homolog 2 (<i>E. Coli</i>) | 4436 | 2 | 2p22-p21 | yes | yes | Colorectal; endometrial; ovarian | Colorectal; endometrial; ovarian | Hereditary non-polyposis colorectal cancer | E | Rec | D; Mis; N; F; S | | | | 4436; COCA1; P43246; HNPCC1; FCC1; HNPCC; ENSG00000095002; MSH2 |
| MSH6 | Muts homolog 6 (<i>E. Coli</i>) | 2956 | 2 | 2p16 | yes | yes | Colorectal | Colorectal; endometrial; ovarian | Hereditary non-polyposis colorectal cancer | E | Rec | Mis; N; F; S | | | | MSH6; GTBP; HNPCC5; HSAP; ENSG00000116062; 2956; P52701 |
| MSI2 | Musashi homolog 2 (<i>Drosophila</i>) | 124540 | 17 | 17q23.2 | yes | | CML | | | L | Dom | T | HOXA9 | | | MSI2; ENSG00000153944; 124540 |
| MSN | Moesin | 4478 | X | Xq11.2-q12 | yes | | ALCL | | | L | Dom | T | ALK | | | MSN; P26038; ENSG00000147065; 4478 |
| MTCP1 | Mature T-cell proliferation 1 | 4515 | X | Xq28 | yes | | T cell prolymphocytic leukaemia | | | L | Dom | T | TRA@ | | | GS1-273L24_4; C6_1B; ENSG00000214827; 4515; MTCP1 |
| MUC1 | Mucin 1; transmembrane | 4582 | 1 | 1q21 | yes | | B-NHL | | | L | Dom | T | IGH@ | | | MUC1; PEM; H23AG; CD227; EMA; MAM6; PEMT; PUM; ENSG00000185499; 4582 |

| | | | | | | | | | | | | | | |
|--------------|---|------|----|-----------------|-----|--|---|----------------------------|------|-----|------|--------------------------------------|--|---|
| MUTYH | Muty homolog (E. Coli) | 4595 | 1 | 1p34.3-1p32.1 | yes | | Colorectal | Adenomatous polyposis coli | E | Rec | Mis | | | MUTYH; MYH; MYHbeta; MGC4416; hMYH; ENSG00000132781; 4595 |
| MYB | V-myb myeloblastosis viral oncogene homolog | 4602 | 6 | 6q22-23 | yes | | Adenoid cystic carcinoma | | E | Dom | T | NFIB | | MYB; c-myb_CDS; c-myb; Cmyb; efg; P10242; ENSG00000118513; 4602 |
| MYC | V-myc myelocytomatosis viral oncogene homolog (avian) | 4609 | 8 | 8q24.12-q24.13 | yes | | Burkitt lymphoma; amplified in other cancers; B-CLL | | L; E | Dom | A; T | IGK@; BCL5; BCL7A ; BTG1; TRA@; IGH@ | | 4609; c-Myc; ENSG00000136997; MYC |
| MYCL1 | V-myc myelocytomatosis viral oncogene homolog 1; lung carcinoma derived (avian) | 4610 | 1 | 1p34.3 | yes | | Small cell lung carcinoma | | E | Dom | A | | | 4610; LMYC; MYCL; ENSG00000116990; MYCL1 |
| MYCN | V-myc myelocytomatosis viral related oncogene; neuroblastoma derived (avian) | 4613 | 2 | 2p24.1 | yes | | Neuroblastoma | | O | Dom | A | | | MYCN; N-myc; ODED; MODED; NMYC; ENSG00000134323; 4613 |
| MYD88 | Myeloid differentiation primary response gene (88) | 4615 | 3 | 3p22 | yes | | ABC-DLBCL | | L | Dom | Mis | | | Q99836; MYD88_ENST00000396334; 4615; MYD88D |
| MYH11 | Myosin; heavy polypeptide 11; smooth muscle | 4629 | 16 | 16p13.13-p13.12 | yes | | AML | | L | Dom | T | CBFB | | MYH11; ENSG00000133392; 4629 |

| | | | | | | | | | | | | | | | | |
|--------------|--|-------|----|-------------|-----|-----|--|----------------------------|------------|-----|-----------|---|--------|-----|---|---|
| MYH9 | Myosin; heavy polypeptide 9; non-muscle | 4627 | 22 | 22q13.1 | yes | | ALCL | | | L | Dom | T | ALK | yes | Deafness; autosomal dominant 17; Epstein syndrome; Fechtner syndrome; May-Hegglin anomaly; Sebastian syndrome | 4627; P35579; DFNA17; ENSG00000100345; MYH9 |
| MYST4 | MYST histone acetyltransferase (monocytic leukemia) 4 (MORF) | 23522 | 10 | 10q22 | yes | | AML | | | L | Dom | T | CREBBP | | | 23522; ENSG00000156650; DKFZp313G1618; FLJ90335; KIAA0383; MORF; MOZ2; qkf; querkopf; Q8WYB5; MYST4 |
| NACA | Nascent-polypeptide-associated complex alpha polypeptide | 4666 | 12 | 12q23-q24.1 | yes | | NHL | | | L | Dom | T | BCL6 | | | 4666; NACAP1; FKSG17; Q13765; NACA1; ENSG00000196531; NACA; HSD48; MGC117224 |
| NBS1 | Nijmegen breakage syndrome 1 (nibrin) | 4683 | 8 | 8q21 | | yes | NHL; glioma; medulloblastoma; rhabdomyosarcoma | Nijmegen breakage syndrome | L; E; M; O | Rec | Mis; N; F | | | | | NBN; AT-V2; NBS1; MGC87362; AT-V1; NBS; FLJ10155; ATV; ENSG00000104320; 4683 |

| | | | | | | | | | | | | | | | |
|---------------|--|-------|----|---------|-----|-----|-------------------------------------|------------------------------|--------------------------|---|-----|--------------------|---------------|--|--|
| NCOA1 | Nuclear receptor coactivator 1 | 8648 | 2 | 2p23 | yes | | Alveolar rhabdomyosarcoma | | | M | Dom | T | PAX3 | | NCOA1; RIP160; F-SRC-1; MGC129720; MGC129719; NCoA-1; SRC1; ENSG0000084676; 8648 |
| NCOA2 | Nuclear receptor coactivator 2 (TIF2) | 10499 | 8 | 8q13.1 | yes | | AML; chondrosarcoma | | | L | Dom | T | RUNXBP2; HEY1 | | 10499; TIF2; GRIP1; MGC138808; NCoA-2; ENSG00000140396; NCOA2 |
| NCOA4 | Nuclear receptor coactivator 4 - PTC3 (ELE1) | 8031 | 10 | 10q11.2 | yes | | Papillary thyroid | | | E | Dom | T | RET | | 8031; RP11-481A12.4; ARA70; DKFZp762E1112; RFG; Q13772; ELE1; PTC3; ENSG00000138293; NCOA4 |
| NDRG1 | N-myc downstream regulated 1 | 10397 | 8 | 8q24.3 | yes | | Prostate | | | E | Dom | T | ERG | | NDRG1; NDR1; CAP43; NMSL; PROXY1; TDD5; DRG1; RTP; GC4; HMSNL; TARG1; CMT4D; RIT42; Q92597; ENSG00000104419; 10397 |
| NF1 | Neurofibromatosis type 1 gene | 4763 | 17 | 17q12 | yes | yes | Neurofibroma; glioma | Neurofibroma; glioma | Neurofibromatosis type 1 | O | Rec | D; Mis; N; F; S; O | | | 4763; NFNS; P21359; ENSG00000196712; NF1 |
| NF2 | Neurofibromatosis type 2 gene | 4771 | 22 | 22q12.2 | yes | yes | Meningioma; acoustic neuroma; renal | Meningioma; acoustic neuroma | Neurofibromatosis type 2 | O | Rec | D; Mis; N; F; S; O | | | SCH; ACN; Merlin; P35240; ENSG00000186575; 4771; NF2; BANF |
| NFE2L2 | Nuclear factor (erythroid-derived 2)-like 2 (NRF2) | 4780 | 2 | 2q31 | yes | | NSCLC; HNSCC | | | E | Dom | Mis | | | 4780; ENSG00000116044; NRF2; Q16236; NFE2L2 |

| | | | | | | | | | | | | | | | |
|---------------|---|-------|----|----------|-----|--|----------------------------------|--|--|---|-----|-----------|-----------------|--|---|
| NFIB | Nuclear factor I/B | 4781 | 9 | 9p24.1 | yes | | Adenoid cystic carcinoma; lipoma | | | E | Dom | T | MYB; HGMA2 | | 4781; RP11-280024_2; NFIB3; NFI-RED; NFIB2; ENSG00000147862; NFIB |
| NFKB2 | Nuclear factor of kappa light polypeptide gene enhancer in B-cells 2 (p49/p100) | 4791 | 10 | 10q24 | yes | | B-NHL | | | L | Dom | T | IGH@ | | LYT10; ENSG00000077150; NFKB2; 4791; LYT-10 |
| NIN | Ninein (GSK3B interacting protein) | 51199 | 14 | 14q24 | yes | | MPN | | | L | Dom | T | PDGFRB | | 51199; KIAA1565; ENSG00000100503; NIN |
| NKX2-1 | NK2 homeobox 1 | 7080 | 14 | 14q13 | yes | | NSCLC | | | E | Dom | A | | | TTF-1; BCH; NK-2; NKX2_1; NKX2A; BHC; TTF1; TITF1; P43699; ENSG00000136352; TITF1; 7080; TEBP |
| NONO | Non-POU domain containing; octamer-binding | 4841 | X | Xq13.1 | yes | | Papillary renal | | | E | Dom | T | TFE3 | | 4841; Q15233; P54; NMT55; P54NRB; NRB54; ENSG00000147140; NONO |
| NOTCH1 | Notch homolog 1; translocation-associated (Drosophila) (TAN1) | 4851 | 9 | 9q34.3 | yes | | T-ALL | | | L | Dom | T; Mis; O | TRB@ | | NOTCH1; hN1; ENSG00000148400; 4851; P46531; TAN1 |
| NOTCH2 | Notch homolog 2 | 4853 | 1 | 1p13-p11 | yes | | Marginal zone lymphoma; DLBCL | | | L | Dom | N; F; Mis | | | 4853; Q04721; hN2; AGS2; ENSG00000134250; NOTCH2 |
| NPM1 | Nucleophosmin (nucleolar phosphoprotein B23; numatrin) | 4869 | 5 | 5q35 | yes | | NHL; APL; AML | | | L | Dom | T; F | ALK; RARA; MLF1 | | NPM1; NPM; MGC104254; B23; ENSG00000181163; P06748; 4869 |

| | | | | | | | | | | | | | | | | |
|---------------|---|-------|----|--------------|-----|--|---|--|--|------|-----|-----|-------------------|-----|-----------------------|---|
| NR4A3 | Nuclear receptor subfamily 4; group A; member 3 (NOR1) | 8013 | 9 | 9q22 | yes | | Extraskeleta l myxoid chondrosarc oma | | | M | Dom | T | EWSR1 | | | NR4A3; MINOR; CSMF; NOR1; TEC; CHN; Q92570; ENSG00000119508; 8013 |
| NRAS | Neuroblastom a RAS viral (v- ras) oncogene homolog | 4893 | 1 | 1p13.2 | yes | | Melanoma; MM; AML; thyroid | | | L; E | Dom | Mis | | | | N-ras; NRAS1; P01111; ENSG00000213281; 4893; NRAS |
| NSD1 | Nuclear receptor binding SET domain protein 1 | 64324 | 5 | 5q35 | yes | | AML | | | L | Dom | T | NUP98 | yes | Sotos Syndrom e | 64324; FLJ44628; STO; ARA267; DKFZp666C163; FLJ22263; Q96L73; ENSG00000165671; NSD1; SOTOS |
| NT5C2 | 5'- Nucleotidase; cytosolic II | 22978 | 10 | 10q24. 32 | yes | | Relapse ALL | | | L | | Mis | | | | 22978; ENSG00000076685; cN II; GMP; NT5B; PNT5; P49902; NT5C2 |
| NTRK1 | Neurotrophic tyrosine kinase; receptor; type 1 | 4914 | 1 | 1q21- q22 | yes | | Papillary thyroid | | | E | Dom | T | TPM3; TPR; TFG | | | DKFZp781I14186; ENSG00000198400; TRK; TRKA; p140- TrkA; MTC; TRK1; P04629; NTRK1; 4914 |
| NTRK3 | Neurotrophic tyrosine kinase; receptor; type 3 | 4916 | 15 | 15q25 | yes | | Congenital fibrosarcom a; secretory breast | | | E; M | Dom | T | ETV6 | | | Q16288; TRKC; gp145(trkC); ENSG00000140538; 4916; NTRK3 |
| NUMA1 | Nuclear mitotic apparatus protein 1 | 4926 | 11 | 11q13 | yes | | APL | | | L | Dom | T | RARA | | | NUMA; Q14980; ENSG00000137497; 4926; NUMA1 |
| NUP214 | Nucleoporin 214 kDa (CAN) | 8021 | 9 | 9q34.1 | yes | | AML; T- ALL | | | L | Dom | T | DEK; SET; ABL1 | | | NUP214; ENSG00000126883; CAN; P35658; CAIN; N214; RP11- 544A12_7; D9S46E; MGC104525; 8021 |

| | | | | | | | | | | | | | | | |
|---------------|--|--------|------|-----------------------|-----|--|---|--|--|---|-----|---|---|--|---|
| NUP98 | Nucleoporin 98 kDa | 4928 | 11 | 11p15 | yes | | AML | | | L | Dom | T | HOXA9; NSD1; WHSC1L1; DDX10; TOP1; HOXD13; PMX1; HOXA13; HOXD11; HOXA11; RAP1GDS1 ; HOXC11 | | NUP196; ENSG00000110713; ADIR2; 4928; NUP98 |
| NUTM2A | NUT family member 2A | 728118 | 10 | 10q23. 2 | yes | | Endometrial stromal sarcoma | | | M | Dom | T | YWHAE | | KIAA2020; NUTM2A; ENSG00000184923; FAM22A; 728118; Q8IVF1; Q5VT03 |
| NUTM2B | NUT family member 2B | 729262 | 10 | 10q22. 3 | yes | | Endometrial stromal sarcoma | | | M | Dom | T | YWHAE | | A6NNL0; NUTM2B; FAM22B |
| OLIG2 | Oligodendrocyte lineage transcription factor 2 (BHLHB1) | 10215 | 21 | 21q22. 11 | yes | | T-ALL | | | L | Dom | T | TRA@ | | OLIG2; OLIGO2; PRKCBP2; RACK17; BHLHB1; ENSG00000205927; 10215 |
| OMD | Osteomodulin | 4958 | 9 | 9q22.3 1 | yes | | Aneurysmal bone cyst | | | M | Dom | T | USP6 | | OMD; osteoadherin; SLRR2C; Q99983; ENSG00000127083; 4958 |
| P2RY8 | Purinergic receptor P2Y; G-protein coupled; 8 | 286530 | X; Y | Xp22.3 ; Yp11.3 | yes | | B-ALL; Down syndrome associated ALL | | | L | Dom | T | CRLF2 | | 286530; RP11- 261P4_4; Q86VZ1; P2Y8; MGC50878; ENSG00000182162; P2RY8 |

| | | | | | | | | | | | | | | | | |
|-----------------|---|-------|----|---------------|-----|-----|------------------------------------|--|---|---------|-----|--------------------|-------------------------------------|-----|---|---|
| PAFAH1B2 | Platelet-activating factor acetylhydrolase; isoform Ib; beta subunit 30 kDa | 5049 | 11 | 11q23 | yes | | MLCLS | | | L | Dom | T | IGH@ | | | 5049; P68402; ENSG00000168092; PAFAH1B2 |
| PALB2 | Partner and localizer of BRCA2 | 79728 | 16 | 16p12.1 | | yes | | Wilms tumour; medulloblastoma; AML; breast | Fanconi anaemia N; breast cancer susceptibility | L; O; E | Rec | F; N; Mis | | | | 79728; ENSG00000083093; PALB2 |
| PAX3 | Paired box gene 3 | 5077 | 2 | 2q35 | yes | | Alveolar rhabdomyosarcoma | | | M | Dom | T | FOXO1A; NCOA1 | yes | Waardenburg syndrome; craniofacial-deafness-hand syndrome | 5077; MGC120382; MGC120381; MGC134778; MGC120384; WS1; P23760; HUP2; MGC120383; CDHS; ENSG00000135903; PAX3 |
| PAX5 | Paired box gene 5 (B-cell lineage specific activator protein) | 5079 | 9 | 9p13 | yes | | NHL; ALL; B-ALL | | | L | Dom | T; Mis; D; F; S | IGH@; ETV6; PML; FOXP1; ZNF521; ELN | | | PAX5; Q02548; BSAP; ENSG00000196092; 5079 |
| PAX7 | Paired box gene 7 | 5081 | 1 | 1p36.2-p36.12 | yes | | Alveolar rhabdomyosarcoma | | | M | Dom | T | FOXO1A | | | PAX7; PAX7B; HUP1; P23759; ENSG0000009709; 5081 |
| PAX8 | Paired box gene 8 | 7849 | 2 | 2q12-q14 | yes | | Follicular thyroid | | | E | Dom | T | PPARG | yes | Thyroid dysgenesiss | 7849; ENSG00000125618; PAX8 |
| PBRM1 | Polybromo 1 | 55193 | 3 | 3p21 | yes | | Clear cell renal carcinoma; breast | | | E | Rec | Mis; N; F; S; D; O | | | | 55193; BAF180; MGC156155; MGC156156; PB1; PBRM1 |
| PBX1 | Pre-B-cell leukemia transcription factor 1 | 5087 | 1 | 1q23 | yes | | Pre B-ALL; myoepithelioma | | | L; M | Dom | T | TCF3; EWSR1 | | | PBX1; P40424; 5087 |

| | | | | | | | | | | | | | | | |
|----------------|---|------|----|---------------|-----|--|--|--|--|---------|-----|-----------|--|--|---|
| PCM1 | Pericentriolar material 1 (PTC4) | 5108 | 8 | 8p22-p21.3 | yes | | Papillary thyroid; CML; MPN | | | E; L | Dom | T | RET; JAK2 | | Q15154; PCM1; 5108; ENSG00000078674; PTC4 |
| PCSK7 | Proprotein convertase subtilisin/kexin type 7 | 9159 | 11 | 11q23.3 | yes | | MLCLS | | | L | Dom | T | IGH@ | | 9159; LPC; Q16549; PC7; PC8; ENSG00000160613; PCSK7 |
| PDE4DIP | Phosphodiesterase 4D interacting protein (myomegalin) | 9659 | 1 | 1q12 | yes | | MPN | | | L | Dom | T | PDGFRB | | 9659; ENSG00000178104; PDE4DIP |
| PDGFB | Platelet-derived growth factor beta polypeptide (simian sarcoma viral (v-sis) oncogene homolog) | 5155 | 22 | 22q12.3-q13.1 | yes | | DFSP | | | M | Dom | T | COL1A1 | | 5155; SIS; SSV; c-sis; P01127; PDGF2; FLJ12858; PDGFB; ENSG00000100311 |
| PDGFRA | Platelet-derived growth factor; a-receptor | 5156 | 4 | 4q11-q13 | yes | | GIST; idiopathic hypereosinophilic syndrome; paediatric glioblastoma | | | L; M; O | Dom | Mis; O; T | FIP1L1 | | PDGFRA; MGC74795; P16234; CD140a; Rhe-PDGFR; CD140A; PDGFR2; ENSG00000134853; 5156 |
| PDGFRB | Platelet-derived growth factor receptor; beta polypeptide | 5159 | 5 | 5q31-q32 | yes | | MPN; AML; CMML; CML | | | L | Dom | T | ETV6; TRIP11; HIP1; RAB5EP; H4; NIN; HCMOGT-1; PDE4DIP | | 5159; JTK12; CD140b; PDGFR; CD140B; PDGFR1; PDGFR-beta; ENSG00000113721; P09619; PDGFRB |
| PER1 | Period homolog 1 (Drosophila) | 5187 | 17 | 17p13.1-17p12 | yes | | AML; CMML | | | L | Dom | T | ETV6 | | 5187; O15534; RIGUI; PER; ENSG00000179094; PER1 |

| | | | | | | | | | | | | | | | |
|---------------|---|-------|----|--------|-----|-----|---|---------------|------------------------|------|-----|-------------------|-----------------------------|-----|---|
| PHF6 | PHD finger protein 6 | 84295 | X | Xq26.3 | yes | | ETP ALL | | | L | Rec | F; N; Splice; Mis | | | 84295; BORJ; MGC14797; ENSG00000156531; PHF6 |
| PHOX2B | Paired-like homeobox 2b | 8929 | 4 | 4p12 | yes | yes | Neuroblastoma | Neuroblastoma | Familial neuroblastoma | O | Rec | Mis; F | | yes | congenital central hypoventilation syndrome 8929; PHOX2B |
| PICALM | Phosphatidylinositol binding clathrin assembly protein (CALM) | 8301 | 11 | 11q14 | yes | | TALL; AML; | | | L | Dom | T | MLLT10; MLL | | PICALM; CLTH; Q13492; CALM; ENSG00000073921; 8301 |
| PIK3CA | Phosphoinositide-3-kinase; catalytic; alpha polypeptide | 5290 | 3 | 3q26.3 | yes | | Colorectal; gastric; glioblastoma; breast | | | E; O | Dom | Mis | | | PIK3CA; MGC142161; p110-alpha; PI3K; MGC142163; ENSG00000121879; P42336; 5290 |
| PIK3R1 | Phosphoinositide-3-kinase; regulatory subunit 1 (alpha) | 5295 | 5 | 5q13.1 | yes | | Glioblastoma; ovarian; colorectal | | | E; O | Rec | Mis; F; O | | | p85-ALPHA; P27986; ENSG00000145675; PIK3R1; 5295; GRB1 |
| PIM1 | Pim-1 oncogene | 5292 | 6 | 6p21.2 | yes | | NHL | | | L | Dom | T | BCL6 | | 5292; PIM; P11309; PIM1; ENSG00000137193 |
| PLAG1 | Pleiomorphic adenoma gene 1 | 5324 | 8 | 8q12 | yes | | Salivary adenoma | | | E | Dom | T | TCEA1; LIFR; CTNNB1; CHCHD7 | | PLAG1; ENSG00000181690; 5324 |
| PML | Promyelocytic leukemia | 5371 | 15 | 15q22 | yes | | APL; ALL | | | L | Dom | T | RARA; PAX5 | | PML; TRIM19; RNF71; MYL; ENSG00000140464; 5371; PP8675 |

| | | | | | | | | | | | | | | | |
|----------------|--|-------|----|----------|-----|-----|---------|---|---|---|-----|-----------|-------|--|--|
| PMS1 | PMS1 postmeiotic segregation increased 1 (S. <i>Cerevisiae</i>) | 5378 | 2 | 2q31-q33 | | yes | | Colorectal; endometrial; ovarian | Hereditary non-polyposis colorectal cancer | E | Rec | Mis; N | | | DKFZp781M0253; hPMS1; HNPCC3; PMSL1; ENSG00000064933; PMS1; 5378 |
| PMS2 | PMS2 postmeiotic segregation increased 2 (S. <i>Cerevisiae</i>) | 5395 | 7 | 7p22 | | yes | | Colorectal; endometrial; ovarian; medulloblastoma; glioma | Hereditary non-polyposis colorectal cancer; Turcot syndrome | E | Rec | Mis; N; F | | | PMS2; HNPCC4; PMS2CL; PMSL2; H_DJ0042M02_9; ENSG00000122512; 5395 |
| PMX1 | Paired mesoderm homeo box 1 | 5396 | 1 | 1q24 | yes | | AML | | | L | Dom | T | NUP98 | | 5396; ENSG00000116132; PRRX1 |
| PNUTL1 | Peanut-like 1 (Drosophila) | 5413 | 22 | 22q11.2 | yes | | AML | | | L | Dom | T | MLL | | 5413; HCDCREL-1; H5; PNUTL1; Q99719; ENSG00000184702; SEPT5 |
| POT1 | Protection of telomeres 1 | 25913 | 7 | 7q31.33 | yes | | CLL | | | L | | Mis; N | | | DKFZP586D211; DKFZp586D211; hPot1; ENSG00000128513; 25913; POT1 |
| POU2AF1 | POU domain; class 2; associating factor 1 (OBF1) | 5450 | 11 | 11q23.1 | yes | | NHL | | | L | Dom | T | BCL6 | | 5450; OBF1; OBF-1; Q16633; OCAB; BOB1; ENSG00000110777; POU2AF1 |
| POU5F1 | POU domain; class 5; transcription factor 1 | 5460 | 6 | 6p21.31 | yes | | Sarcoma | | | M | Dom | T | EWSR1 | | OTF3C; MGC22487; OTF3; OCT3; OCT4; Oct4; OTF3P1; POU5F1P1; ENSG00000230336; POU5F1; 5460; OTF4 |

| | | | | | | | | | | | | | | | | |
|----------------|---|-------|----|-------------|-----|--|------------------------------|--|--|---|------|-----------------|------|-----|---|--|
| PPARG | Peroxisome proliferative activated receptor; gamma | 5468 | 3 | 3p25 | yes | | Follicular thyroid | | | E | Dom | T | PAX8 | yes | Insulin resistance ; lipodystrophy; familial partial L;diabetes mellitus; insulin-resistant; with acanthosis nigricans and hypertension | HUMPPARG; PPARG1; NR1C3; PPARG2; ENSG00000132170; 5468; PPARG |
| PPP2R1A | Protein phosphatase 2; regulatory subunit A; alpha | 5518 | 19 | 19q13.41 | yes | | Clear cell ovarian carcinoma | | | E | Dom? | Mis | | | | MGC786; PR65A; P30153; ENSG00000105568; PPP2R1A; 5518 |
| PRCC | Papillary renal cell carcinoma (translocation-associated) | 5546 | 1 | 1q21.1 | yes | | Papillary renal | | | E | Dom | T | TFE3 | | | Q92733; PRCC; 5546; ENSG00000143294; MGC17178; MGC4723; RCCP1; TPRC |
| PRDM1 | PR domain containing 1; with ZNF domain | 639 | 6 | 6q21 | yes | | DLBCL | | | L | Rec | D; N; Mis; F; S | | | | PRDM1; O75626; BLIMP1; MGC118923; RP1-134E15_1; MGC118922; MGC118924; PRDIBF1; MGC118925; ENSG00000057657; 639 |
| PRDM16 | PR domain containing 16 | 63976 | 1 | 1p36.23-p33 | yes | | MDS; AML | | | L | Dom | T | EVII | | | KIAA1675; Q9HAZ2; PFM13; MEL1; ENSG00000142611; 63976; PRDM16 |

| | | | | | | | | | | | | | | | |
|----------------|--|-------|----|-----------|-----|-----|----------------------------------|---|--|------------|----------|-----------------|-------|--|--|
| PRF1 | Perforin 1 (pore forming protein) | 5551 | 10 | 10q22 | | yes | | Various leukaemia; lymphoma | | L | Rec | M | | Type 2 familial hemophagocytic lymphohistiocytosis | P14222; PRF1; 5551; ENSG00000180644; FLH2; HPLH2; MGC65093; P1; PFP |
| PRKAR1A | Protein kinase; camp-dependent; regulatory; type I; alpha (tissue specific extinguisher 1) | 5573 | 17 | 17q23-q24 | yes | yes | Papillary thyroid | Myxoma; endocrine; papillary thyroid | Carney complex | E; M | Dom; Rec | T; Mis; N; F; S | RET | | PPNAD1; CAR; CNC; TSE1; MGC17251; PKR1; CNC1; P10644; PRKAR1; PRKAR1A; ENSG00000108946; 5573; DKFZp779L0468 |
| PSIP1 | PC4 and SFRS1 interacting protein 1 (LEDGF) | 11168 | 9 | 9p22.3 | yes | | AML | | | L | Dom | T | NUP98 | | PSIP1; PSIP2; ENSG00000164985; 11168 |
| PTCH | Homolog of Drosophila Patched gene | 5727 | 9 | 9q22.3 | yes | yes | Skin basal cell; medulloblastoma | Skin basal cell; medulloblastoma | Nevoid basal cell carcinoma syndrome | E; M | Rec | Mis; N; F; S | | | Q13635; RP11-435O5_3; FLJ42602; PTCH1; ENSG00000185920; PTC; PTC1; BCNS; NBCCS; FLJ26746; HPE7; PTCH; 5727; PTCH |
| PTEN | Phosphatase and tensin homolog gene | 5728 | 10 | 10q23.3 | yes | yes | Glioma; prostate; endometrial | Harmartoma; glioma; prostate; endometrial | Cowden syndrome; Bannayan-Riley-Ruvalcaba syndrome | L; E; M; O | Rec | D; Mis; N; F; S | | | P60484; MMAC1; ENSG00000171862; BZS; PTEN1; TEP1; MGC11227; PTEN; 5728; MHAM |

| | | | | | | | | | | | | | | | | |
|----------------|---|------|----|-------------|-----|--|------------------------------------|--|--|------|-----|-----------|--------|-----|------------------------------|--|
| PTPN11 | Protein tyrosine phosphatase; non-receptor type 11 | 5781 | 12 | 12q24.1 | yes | | JMML; AML; MDS | | | L | Dom | Mis | | yes | Noonan Syndrome | SH-PTP2; PTP2C; NS1; SH-PTP3; PTP-1D; BPTP3; SHP-2; MGC14433; SHP2; ENSG00000179295; PTPN11; 5781; Q06124; CFC |
| PTPRC | Protein tyrosine phosphatase; receptor type; C | 5788 | 1 | 1q31-q32 | yes | | T-ALL | | | L | | | | | | PTPRC; CD45; LY5; B220; GP180; T200; ENSG00000081237; 5788; LCA |
| RAB5EP | Rabaptin; RAB gtpase binding effector protein 1 (RABPT5) | 9135 | 17 | 17p13 | yes | | CMML | | | L | Dom | T | PDGFRB | | | 9135; Q15276; rabaptin-5; RABPT5; neurocrescin; RAB5EP; ENSG00000029725; RABEP1 |
| RAC1 | Ras-related C3 botulinum toxin substrate 1 (rho family; small GTP binding protein Rac1) | 5879 | 7 | 7p22 | yes | | Melanoma; carcinoma | | | E | Dom | Mis; F | | | | MIG5; ENSG00000136238; TC-25; p21-Rac1; P63000; MGC111543; RAC1; 5879 |
| RAD21 | RAD21 homolog (S. Pombe) | 5885 | 8 | q24.11 | yes | | AML; endometrium; colorectal; lung | | | L; E | Rec | Mis; N; F | | | Cornelia de Lange syndrome-4 | RAD21; HR21; SCC1; FLJ40596; HRAD21; NXP1; O60216; MCD1; hHR21; KIAA0078; ENSG00000164754; 5885; FLJ25655 |
| RAD51L1 | RAD51-like 1 (S. Cerevisiae) (RAD51B) | 5890 | 14 | 14q23-q24.2 | yes | | Lipoma; uterine leiomyoma | | | M | Dom | T | HMGA2 | | | RAD51L1; ENSG00000182185; MGC34245; RAD51B; REC2; R51H2; hREC2; O15315; 5890; RAD51L1 |

| | | | | | | | | | | | | | | | |
|-----------------|--|-------|----|----------|-----|-----|--|--|----------------------------|------------|-----|-----------------|--------------------------------|--|---|
| RAF1 | V-raf-1 murine leukemia viral oncogene homolog 1 | 5894 | 3 | 3p25 | yes | | Pilocytic astrocytoma | | | M | Dom | T | SRGAP3 | | RAF1; Raf-1; CRAF; c-Raf; ENSG00000132155; P04049; 5894 |
| RALGDS | Ral guanine nucleotide dissociation stimulator | 5900 | 9 | 9q34.3 | yes | | PMBL; Hodgkin lymphoma; | | | L | Dom | T | CIITA | | 5900; FLJ20922; Q12967; RGF; RalGEF; RALGDS; ENSG00000160271 |
| RANBP17 | RAN binding protein 17 | 64901 | 5 | 5q34 | yes | | ALL | | | L | Dom | T | | | |
| RAP1GDS1 | RAP1; GTP-GDP dissociation stimulator 1 | 5910 | 4 | 4q21-q25 | yes | | T-ALL | | | L | Dom | T | NUP98 | | MGC118861; P52306; ENSG00000138698; GDS1; MGC118859; 5910; RAP1GDS1 |
| RARA | Retinoic acid receptor; alpha | 5914 | 17 | 17q12 | yes | | APL | | | L | Dom | T | PML; ZNF145; TIF1; NUMA1; NPM1 | | RARA; RAR; NR1B1; ENSG00000131759; 5914 |
| RB1 | Retinoblastoma gene | 5925 | 13 | 13q14 | yes | yes | Retinoblastoma; sarcoma; breast; small cell lung carcinoma | Retinoblastoma; sarcoma; breast; small cell lung carcinoma | familial retinoblastoma | L; E; M; O | Rec | D; Mis; N; F; S | | | ENSG00000139687; OSRC; P06400; RB; 5925; RB1 |
| RBM15 | RNA binding motif protein 15 | 64783 | 1 | 1p13 | yes | | Acute megakaryocytic leukaemia | | | L | Dom | T | MKL1 | | RBM15; Q96T37; OTT1; OTT; ENSG00000162775; 64783 |
| RECQL4 | Recq protein-like 4 | 9401 | 8 | 8q24.3 | | yes | | Osteosarcoma; skin basal cell; skin squamous cell | Rothmund-Thompson syndrome | M | Rec | N; F; S | | | RECQL4; RecQ4; RTS; RECQ4; ENSG00000160957; 9401 |

| | | | | | | | | | | | | | | | | |
|--------------|--|-------|----|----------|-----|-----|---|--|------------------------------------|------|-----|--------------|---|-----|--|---|
| REL | V-rel reticuloendotheliosis viral oncogene homolog (avian) | 5966 | 2 | 2p13-p12 | yes | | Hodgkin lymphoma | | | L | Dom | A | | | REL; I-Rel; C-Rel; ENSG00000162924; 5966 | |
| RET | Ret proto-oncogene | 5979 | 10 | 10q11.2 | yes | yes | Medullary thyroid; papillary thyroid; pheochromocytoma; NSCLC | Medullary thyroid; papillary thyroid; pheochromocytoma | multiple endocrine neoplasia 2A/2B | E; O | Dom | T; Mis; N; F | H4; PRKAR1A; NCOA4; PCM1; GOLGA5; TRIM33; KTN1; TRIM27; HOOK3; KIF5B; CCDC6 | yes | Hirschsprung disease | RET-ELE1; CDHF12; RET51; MEN2B; PTC; HSCR1; MEN2A; MTC1; ENSG00000165731; P07949; RET; 5979 |
| RNF43 | Ring finger protein 43 | 54894 | 17 | q23.2 | yes | | Cholangiocarcinoma; ovary; pancreas | | | E | Rec | Mis; N; F; S | | | | 54894; DKFZp781H02126; DKFZp781H0392; FLJ20315; MGC125630; RNF124; URCC; Q68DV7; RNF43 |
| ROS1 | V-ros UR2 sarcoma virus oncogene homolog 1 (avian) | 6098 | 6 | 6q22 | yes | | Glioblastoma; NSCLC | | | O; E | Dom | T | GOPC; SDC4; SLC34A2; EZR; LRIG3 | | | 6098; ROS; RP1-179P9_1; MCF3; P08922; ENSG00000047936; ROS1 |
| RPL10 | Ribosomal protein L10 | 6134 | X | Xq28 | yes | | T-ALL | | | L | Dom | Mis | | | | 6134; XX-FW83563B9_1; FLJ23544; QM; P27635; NOV; DKFZp686J1851; DXS648E; DXS648; FLJ27072; ENSG00000147403; RPL10 |
| RPL22 | Ribosomal protein L22 (EAP) | 6146 | 1 | 1p36.31 | yes | | AML; CML | | | L | Dom | T | RUNX1 | | | 6146; EAP; RPL22 |

| | | | | | | | | | | | | | | | | |
|----------------|--|-------|----|--------------|-----|-----|------------------------|-----------------------------|--|---|-----|-----------------|---|-----|--------------------------|---|
| RPL5 | Ribosomal protein L5 | 6125 | 1 | 1p22.1 | yes | | T-ALL | | | L | Dom | Mis; N; F | | yes | Diamond-Blackfan anaemia | 6125; RPL5; ENSG00000122406; MGC117339; P46777; MSTP030 |
| RPN1 | Ribophorin I | 6184 | 3 | 3q21.3-q25.2 | yes | | AML | | | L | Dom | T | EVII | | | 6184; P04843; OST1; ENSG00000163902; RPN1 |
| RUNDC2A | RUN domain containing 2A | 84127 | 16 | 16p13.13 | yes | | PMBL; Hodgkin lymphoma | | | L | Dom | T | CIITA | | | 84127; ENSG00000140660; FLJ12363; Q9HA26; RUNDC2A |
| RUNX1 | Runt-related transcription factor 1 (AML1) | 861 | 21 | 21q22.3 | yes | | AML; preB-ALL; T-ALL | | | L | Dom | T | RPL22; MDS1; EVII; CBFA2T3; CBFA2T1; ETV6; LAF4 | | | 861; PEBP2A2; AMLCR1; CBFA2; AML1; Q01196; ENSG00000159216; RUNX1 |
| RUNXBP2 | Runt-related transcription factor binding protein 2 (MOZ/ZNF220) | 7994 | 8 | 8p11 | yes | | AML | | | L | Dom | T | CREBBP; NCOA2; EP300 | | | ZNF220; Q92794; MOZ; RUNXBP2; ENSG00000083168; MYST3; 7994 |
| SBDS | Shwachman-Bodian-Diamond syndrome protein | 51119 | 7 | 7q11 | | yes | AML; MDS | Schwachman-Diamond syndrome | | L | Rec | Gene Conversion | | | | SBDS; SDS; SWDS; Q9Y3A5; CGI-97; FLJ10917; ENSG00000126524; 51119 |
| SDC4 | Syndecan 4 | 6385 | 20 | 20q12 | yes | | NSCLC | | | E | Dom | T | ROS1 | | | 6385; ENSG00000124145; MGC22217; SYND4; P31431; SDC4 |
| SDH5 | Chromosome 11 open reading frame 79 | 54949 | 11 | 11q12.2 | | yes | Paraganglioma | familial paraganglioma | | M | Rec | M | | | | C11orf79; C11orf79; 54949; ENSG00000167985; FLJ20487 |

| | | | | | | | | | | | | | | | |
|---------------|---|-------|----|------------|-----|-----|---|----------------------------------|---------------------------|---|-----|--------------|--------|--|--|
| SDHB | Succinate dehydrogenase complex; subunit B; iron sulfur (Ip) | 6390 | 1 | 1p36.1-p35 | | yes | | Paraganglioma ; pheochromocytoma | familial paraganglioma | O | Rec | Mis; N; F | | | SDH1; PGL4; IP; SDH; SDHIP; ENSG00000117118; 6390; SDHB |
| SDHC | Succinate dehydrogenase complex; subunit C; integral membrane protein; 15 kDa | 6391 | 1 | 1q21 | | yes | | Paraganglioma ; pheochromocytoma | familial paraganglioma | O | Rec | Mis; N; F | | | SDH3; CYBL; QPS1; PGL3; ENSG00000143252; 6391; SDHC; CYB560 |
| SDHD | Succinate dehydrogenase complex; subunit D; integral membrane protein | 6392 | 11 | 11q23 | | yes | | Paraganglioma ; pheochromocytoma | familial paraganglioma | O | Rec | Mis; N; F; S | | | 6392; PGL1; O14521; CBT1; SDH4; PGL; ENSG00000204370; SDHD |
| SEPT6 | Septin 6 | 23157 | X | Xq24 | yes | | AML | | | L | Dom | T | MLL | | SEPT6; RP5-876A24_2; KIAA0128; Q14141; ENSG00000125354; 23157; SEPT2; MGC16619; SEP2; MGC20339 |
| SET | SET translocation | 6418 | 9 | 9q34 | yes | | AML | | | L | Dom | T | NUP214 | | 6418; I2PP2A; 2PP2A; IGAAD; PHAPII; TAF-IBETA; ENSG00000119335; SET |
| SETBP1 | SET binding protein 1 | 26040 | 18 | 18q21.1 | yes | yes | Atypical CML; sAML; MDS/MPN-U; CMML; JMML | Neuroepithelial tumours | Schinzel-Giedion syndrome | L | Dom | Mis | NUP98 | | |

| | | | | | | | | | | | | | | | | |
|---------------|---|-------|----|----------|-----|--|----------------------------------|--|--|---|------|--------------|------|--|--|---|
| SETD2 | SET domain containing 2 | 29072 | 3 | 3p21.31 | yes | | Clear cell renal carcinoma | | | E | Rec | N; F; S; Mis | | | | SETD2; ENSG00000181555; 29072 |
| SF3B1 | Splicing factor 3b; subunit 1; 155kda | 23451 | 2 | 2q33.1 | yes | | Myelodysplastic syndrome | | | L | Dom | Mis | | | | SF3B1; ENSG00000115524; PRPF10; SAP155; SF3b155; 23451; PRP10; O75533 |
| SFPQ | Splicing factor proline/glutamine rich(polypyrimidine tract binding protein associated) | 6421 | 1 | 1p34.3 | yes | | Papillary renal | | | E | Dom | T | TFE3 | | | 6421; PSF; P23246; ENSG00000116560; SFPQ |
| SFRS3 | Splicing factor; arginine/serine rich 3 | 6428 | 6 | 6p21 | yes | | Follicular lymphoma | | | L | Dom | T | BCL6 | | | SFRS3; SRP20; ENSG00000112081; P84103; 6428; SFRS3 |
| SH2B3 | SH2B adaptor protein 3 | 10019 | 12 | 12q24.12 | yes | | MPN; sAML; erythrocytosis; B-ALL | | | L | Rec? | Mis; F; N | | | Coeliac disease type 13; diabetes mellitus; insulin-dependent; | 10019; LNK; Q9UQQ2; ENSG00000111252; SH2B3 |
| SH3GL1 | SH3-domain GRB2-like 1 (EEN) | 6455 | 19 | 19p13.3 | yes | | AL | | | L | Dom | T | MLL | | | SH3GL1; Q99961; SH3P8; CNSA1; EEN; SH3D2B; ENSG00000141985; 6455 |
| SIL | TAL1 (SCL) interrupting locus | 6491 | 1 | 1p32 | yes | | T-ALL | | | L | Dom | T | TAL1 | | | 6491; SIL; Q15468; ENSG00000123473; STIL |

| | | | | | | | | | | | | | | | |
|----------------|---|-------|----|----------|-----|-----|--------------------|--------------------|----------------------------------|---|-----|--------------|-----------------------|--|---|
| SLC34A2 | Solute carrier family 34 (sodium phosphate); member 2 | 10568 | 4 | 4p15.2 | yes | | NSCLC | | | E | Dom | T | ROS1 | | O95436; SLC34A2; 10568; ENSG00000157765; FLJ90534; NAPI-3B; NAPI-IIb; NPTIIb |
| SLC45A3 | Solute carrier family 45; member 3 | 85414 | 1 | 1q32 | yes | | Prostate | | | E | Dom | T | ETV1; ETV5; ELK4; ERG | | 85414; IPCA-6; IPCA6; PCANAP6; PRST; Q96JT2; ENSG00000158715; SLC45A3 |
| SMARCA4 | SWI/SNF related; matrix associated; actin dependent regulator of chromatin; subfamily a; member 4 | 6597 | 19 | 19p13.2 | yes | | NSCLC; SCCOHT | | | E | Rec | F; N; Mis; S | | | 6597; hSNF2b; ENSG00000127616; BAF190; SNF2-BETA; SNF2LB; FLJ39786; SWI2; P51532; SMARCA4; SNF2; SNF2L4; BRG1 |
| SMARCB1 | SWI/SNF related; matrix associated; actin dependent regulator of chromatin; subfamily b; member 1 | 6598 | 22 | 22q11 | yes | yes | Malignant rhabdoid | Malignant rhabdoid | rhabdoid predisposition syndrome | M | Rec | D; N; F; S | | | 6598; Ini1; Sfh1p; Q12824; INI1; SNF5; hSNFS; BAF47; RDT; SNF5L1; Snr1; ENSG0000099956; SMARCB1 |
| SMARCE1 | SWI/SNF related; matrix associated; actin dependent regulator of chromatin; subfamily e; member 1 | 6605 | 17 | 17q21.2 | | yes | | Meningioma | | O | | | | | 6605; ENSG0000073584; Q969G3; BAF57; SMARCE1 |
| SMO | Smoothened homolog (Drosophila) | 6608 | 7 | 7q31-q32 | yes | | Skin basal cell | | | E | Dom | Mis | | | SMO; Q99835; Gx; SMOH; NP_005622; ENSG00000128602; 6608 |

| | | | | | | | | | | | | | | | |
|---------------|---|-------|----|----------------|-----|--|---------------------------------------|--|--|---|-----|------|------------|-----|---|
| SOCS1 | Suppressor of cytokine signaling 1 | 8651 | 16 | 16p13.13 | yes | | Hodgkin lymphoma; PMBL | | | L | Rec | F; O | | | SOCS1; O15524; TIP3; CIS1; CISH1; JAB; Cish1; SSI1; SSI-1; SOCS-1; ENSG00000185338; 8651 |
| SOX2 | SRY (sex determining region Y)-box 2 | 6657 | 3 | 3q26.3-q27 | yes | | NSCLC; oesophageal squamous carcinoma | | | E | Dom | A | | yes | MICROPHthalmia AND ESOPHAGEAL ATRESIA SYNDROME P48431; MGC2413; ANOP3; ENSG00000181449; SOX2; 6657; MCOPS3 |
| SRGAP3 | SLIT-ROBO Rho gtpase activating protein 3 | 9901 | 3 | 3p25.3 | yes | | Pilocytic astrocytoma | | | M | Dom | T | RAF1 | | SRGAP3; MEGAP; WRP; KIAA0411; SRGAP2; ARHGAP14; ENSG00000196220; 9901 |
| SRSF2 | Serine/arginine-rich splicing factor 2 | 6427 | 17 | 17q25 | yes | | MDS; CLL | | | L | Dom | Mis | | | 6427; Q01130; SFRS2; SFRS2 |
| SS18 | Synovial sarcoma translocation; chromosome 18 | 6760 | 18 | 18q11.2 | yes | | Synovial sarcoma | | | M | Dom | T | SSX1; SSX2 | | Q15532; SYT; SSXT; ENSG00000141380; 6760; SS18 |
| SS18L1 | Synovial sarcoma translocation gene on chromosome 18-like 1 | 26039 | 20 | 20q13.3 | yes | | Synovial sarcoma | | | M | Dom | T | SSX1 | | 26039; KIAA0693; O75177; ENSG00000184402; SS18L1 |
| SSX1 | Synovial sarcoma; X breakpoint 1 | 6756 | X | Xp11.23-p11.22 | yes | | Synovial sarcoma | | | M | Dom | T | SS18 | | 6756; MGC5162; Q16384; MGC150425; SSRC; RP11-552E4_1; ENSG00000126752; SSX1 |

| | | | | | | | | | | | | | | | |
|---------------|--|-------|----|----------------|-----|-----|---|--|------------------------|------------|-----|-----------------|------|--|--|
| SSX2 | Synovial sarcoma; X breakpoint 2 | 6757 | X | Xp11.23-p11.22 | yes | | Synovial sarcoma | | | M | Dom | T | SS18 | | SSX2; HD21; RP11-552J9_2; MGC119055; MGC15364; MGC3884; HOM-MEL-40; SSX; 6757; ENSG00000157950 |
| SSX4 | Synovial sarcoma; X breakpoint 4 | 6759 | X | Xp11.23 | yes | | Synovial sarcoma | | | M | Dom | T | SS18 | | 6759; MGC119056; MGC12411; O60224; ENSG00000204645; SSX4 |
| STAG2 | Stromal antigen 2 | 10735 | X | q25 | yes | | Bladder carcinoma; glioblastoma; melanoma; Ewing's sarcoma; myeloid neoplasms | | | E; L; M; O | Rec | Mis; N; F; S | | | SA2; RP11-517O1_1; bA517O1_1; DKFZp686P168; FLJ25871; SA-2; ENSG00000101972; STAG2; 10735; DKFZp781H1753 |
| STAT3 | Signal transducer and activator of transcription 3 (acute-phase response factor) | 6774 | 17 | 17q21.31 | yes | | T-cell large granular lymphocytic leukaemia | | | L | Dom | Mis; O | | | 6774; FLJ20882; MGC16063; P40763; APRF; STAT3; ENSG00000168610 |
| STAT5B | Signal transducer and activator of transcription 5B | 6777 | 17 | 17q11.2 | yes | | Large granular lymphocytic leukaemia; skin basal cell; APL | | | L; E | Dom | Mis; O | RARA | | 6777; STAT5; P51692; ENSG00000173757; STAT5B |
| STK11 | Serine/threonine kinase 11 gene (LKB1) | 6794 | 19 | 19p13.3 | yes | yes | NSCLC; pancreatic | Jejunal hamartoma; ovarian; testicular; pancreatic | Peutz-Jeghers syndrome | E; M; O | Rec | D; Mis; N; F; S | | | 6794; LKB1; PJS; Q15831; ENSG00000118046; STK11 |

| | | | | | | | | | | | | | | | |
|----------------|--|-------|----|---------------|-----|-----|--|-----------------|--------------------------------|------|-----|---------|-------------------|--|---|
| STL | Six-twelve leukemia gene | 7955 | 6 | 6q23 | yes | | B-ALL | | | L | Dom | T | ETV6 | | |
| SUFU | Suppressor of fused homolog (Drosophila) | 51684 | 10 | 10q24.32 | yes | yes | Medulloblastoma | Medulloblastoma | medulloblastoma predisposition | O | Rec | D; F; S | | | 51684; RP11-47A8_1; SUFUH; Q9UMX1; SUFUXL; PRO1280; ENSG00000121410; SUFU |
| SUZ12 | Suppressor of zeste 12 homolog (Drosophila) | 23512 | 17 | 17q11.2 | yes | | Endometrial stromal tumour | | | M | Dom | T | JAZF1 | | 23512; CHET9; JJAZ1; KIAA0160; ENSG00000178691; Q15022; SUZ12 |
| SYK | Spleen tyrosine kinase | 6850 | 9 | 9q22 | yes | | MDS; peripheral T-cell lymphoma | | | L | Dom | T | ETV6; ITK | | 6850; P43405; ENSG00000165025; SYK |
| TAF15 | TAF15 RNA polymerase II; TATA box binding protein (TBP)-associated factor; 68kda | 8148 | 17 | 17q11.1-q11.2 | yes | | Extraskeletal myxoid chondrosarcoma; ALL | | | L; M | Dom | T | TEC; CHN1; ZNF384 | | TAF15; hTAFII68; Q92804; Npl3; RBP56; TAF2N; ENSG00000172660; 8148 |
| TAL1 | T-cell acute lymphocytic leukemia 1 (SCL) | 6886 | 1 | 1p32 | yes | | Lymphoblastic leukaemia/biphasic | | | L | Dom | T | TRD@; SIL | | TAL1; TCL5; tal-1; P17542; SCL; ENSG00000162367; 6886 |
| TAL2 | T-cell acute lymphocytic leukemia 2 | 6887 | 9 | 9q31 | yes | | T-ALL | | | L | Dom | T | TRB@ | | TAL2; Q16559; 6887 |
| TBL1XR1 | Transducin (beta)-like 1 X-linked receptor 1 | 79718 | 3 | 3q26.32 | yes | | Splenic marginal zone lymphoma | | | L | | F; Mis | | | 79718; C21; DC42; FLJ12894; IRA1; TBLR1; TBL1XR1 |

| | | | | | | | | | | | | | | | |
|---------------|--|-------|----|---------|-----|-----|-------------------------------------|---|--------------------------|---|-----|--------|-----------------|-----|---|
| TCEA1 | Transcription elongation factor A (SII); 1 | 6917 | 8 | 8q11.2 | yes | | Salivary adenoma | | | E | Dom | T | PLAG1 | | 6917; ENSG00000187735; TCEA1 |
| TCF1 | Transcription factor 1; hepatic (HNF1) | 6927 | 12 | 12q24.2 | yes | yes | Hepatic adenoma; hepatocellular | Hepatic adenoma; hepatocellular carcinoma | familial hepatic adenoma | E | Rec | Mis; F | | yes | Maturity-onset diabetes of the young; TYPE III MODY3; HNF1; LFB1; P20823; HNF1A; TCF1; ENSG00000135100; TCF1; 6927 |
| TCF12 | Transcription factor 12 (HTF4; helix-loop-helix transcription factors 4) | 6938 | 15 | 15q21 | yes | | Extraskelatal myxoid chondrosarcoma | | | M | Dom | T | TEC | | 6938; HEB; HTF4; HsT17266; ENSG00000140262; TCF12 |
| TCF3 | Transcription factor 3 (E2A immunoglobulin enhancer binding factors E12/E47) | 6929 | 19 | 19p13.3 | yes | | Pre B-ALL | | | L | Dom | T | PBX1; HLF; TFPT | | 6929; E2A; ITF1; MGC129647; MGC129648; P15923; ENSG00000071564; TCF3 |
| TCF7L2 | Transcription factor 7-like 2 | 6934 | 10 | 10q25.3 | yes | | Colorectal | | | E | Dom | T | VTI1A | | 6934; ENSG00000148737; TCF-4; TCF4; TCF7L2 |
| TCL1A | T-cell leukemia/lymphoma 1A | 8115 | 14 | 14q32.1 | yes | | T-CLL | | | L | Dom | T | TRA@ | | 8115; P56279; TCL1; ENSG00000100721; TCL1A |
| TCL6 | T-cell leukemia/lymphoma 6 | 27004 | 14 | 14q32.1 | yes | | T-ALL | | | L | Dom | T | TRA@ | | TCL6; P56847; ENSG00000187621; 27004 |

| | | | | | | | | | | | | | | | | |
|-------------|---|-------|---|----------|-----|-----|---|----------|--|------|-----|--------------|---------------------------------|-----|--|---|
| TERT | Telomerase reverse transcriptase | 7015 | 5 | 5p15.33 | yes | yes | Melanoma; glioblastoma; hepatocellular carcinoma; bladder; skin basal cell; skin squamous cell; mesothelioma; medulloblastoma; other tumour types | Melanoma | | E; O | Dom | Promoter Mis | | yes | Dyskeratosis congenita; Telomere-related pulmonary fibrosis and/or bone marrow failure 1 | TERT; EST2; TP2; TCS1; hEST2; O14746; O14783; Q2XS35; Q8N6C3; Q8NG46; 7015; TRT; TERT |
| TET2 | Tet oncogene family member 2 | 54790 | 4 | 4q24 | yes | | MDS | | | L | Rec | Mis N; F | | | | Q6N021; TET2-202; 54790; ENSG00000168769; FLJ20032; KIAA1546; MGC125715 |
| TFE3 | Transcription factor binding to IGHM enhancer 3 | 7030 | X | Xp11.22 | yes | | Papillary renal; alveolar soft part sarcoma; renal | | | E | Dom | T | SFPQ; ASPSCR1; PRCC; NONO; CLTC | | | 7030; RCCP2; TFEA; ENSG00000068323; TFE3 |
| TFEB | Transcription factor EB | 7942 | 6 | 6p21 | yes | | Renal cell carcinoma (childhood epithelioid) | | | E; M | Dom | T | ALPHA | | | TFEB; TCFEB; AlphaTFEB; P19484; ENSG00000112561; 7942 |
| TFG | TRK-fused gene | 10342 | 3 | 3q11-q12 | yes | | Papillary thyroid; ALCL; NSCLC | | | E; L | Dom | T | NTRK1; ALK | | | 10342; TF6; Q92734; TFG; ENSG00000114354 |

| | | | | | | | | | | | | | | | |
|----------------|---|-------|----|----------|-----|--|----------------------|--|--|---|-----|---|-----------------------|--|--|
| TFPT | TCF3 (E2A) fusion partner (in childhood leukaemia) | 29844 | 19 | 19q13 | yes | | pre-B ALL | | | L | Dom | T | TCF3 | | 29844; P0C1Z6; ENSG00000105619; TFPT |
| TFRC | Transferrin receptor (p90; CD71) | 7037 | 3 | 3q29 | yes | | NHL | | | L | Dom | T | BCL6 | | 7037; P02786; CD71; TFR1; ENSG00000072274; TFRC |
| THRAP3 | Thyroid hormone receptor associated protein 3 (TRAP150) | 9967 | 1 | 1p34.3 | yes | | Aneurysmal bone cyst | | | M | Dom | T | USP6 | | 9967; MGC133082; Q9Y2W1; MGC133083; TRAP150; FLJ22082; ENSG00000054118; THRAP3 |
| TIF1 | Transcriptional intermediary factor 1 (PTC6; TIF1A) | 8805 | 7 | 7q32-q34 | yes | | APL | | | L | Dom | T | RARA | | P04720; hTIF1; TIF1A; Tif1a; TF1A; TIF1ALPHA; RNF82; ENSG00000122779; 8805; TRIM24; PTC6; TIF1 |
| TLX1 | T-cell leukemia; homeobox 1 (HOX11) | 3195 | 10 | 10q24 | yes | | T-ALL | | | L | Dom | T | TRB@; TRD@ | | TLX1; P31314; HOX11; TCL3; ENSG00000107807; 3195 |
| TLX3 | T-cell leukemia; homeobox 3 (HOX11L2) | 30012 | 5 | 5q35.1 | yes | | T-ALL | | | L | Dom | T | BCL11B | | HOX11L2; O43711; RNX; ENSG00000164438; TLX3; 30012 |
| TMPRSS2 | Transmembrane protease; serine 2 | 7113 | 21 | 21q22.3 | yes | | Prostate | | | E | Dom | T | ERG; ETV1; ETV4; ETV5 | | O15393; PRSS10; ENSG00000184012; TMPRSS2; 7113 |

| | | | | | | | | | | | | | | | |
|-----------------|---|------|----|-------------|-----|-----|--|--|----------------------|------------|-----|-----------|------------------|--|---|
| TNFAIP3 | Tumour necrosis factor; alpha-induced protein 3 | 7128 | 6 | 6q23 | yes | | Marginal zone B-cell lymphomas; Hodgkin lymphoma; PMBL | | | L | Rec | D; N; F | | | 7128; TNFAIP2; P21580; A20; MGC104522; MGC138687; MGC138688; OTUD7C; TNFAIP3; ENSG00000118503 |
| TNFRSF14 | Tumour necrosis factor receptor superfamily; member 14 (herpesvirus entry mediator) | 8764 | 1 | 1p36.32 | yes | | Follicular lymphoma | | | L | Rec | Mis; N; F | | | 8764; Q92956; HVEA; HVEM; LIGHTR; ATAR; TR2; ENSG00000157873; TNFRSF14 |
| TNFRSF17 | Tumour necrosis factor receptor superfamily; member 17 | 608 | 16 | 16p13.1 | yes | | Intestinal T-cell lymphoma | | | L | Dom | T | IL2 | | 608; BCMA; BCM; Q02223; CD269; ENSG0000048462; TNFRSF17 |
| TOP1 | Topoisomerase (DNA) I | 7150 | 20 | 20q12-q13.1 | yes | | AML* | | | L | Dom | T | NUP98 | | RP3-511B24_2; P11387; TOPI; ENSG00000198900; 7150; TOPI |
| TP53 | Tumour protein p53 | 7157 | 17 | 17p13 | yes | yes | Breast; colorectal; lung; sarcoma; adrenocortical; glioma; multiple other tumour types | Breast; sarcoma; adrenocortical carcinoma; glioma; multiple other tumour types | Li-Fraumeni syndrome | L; E; M; O | Rec | Mis; N; F | | | LFS1; TRP53; p53; P53; P04637; ENSG00000141510; 7157; TP53 |
| TPM3 | Tropomyosin 3 | 7170 | 1 | 1q22-q23 | yes | | Papillary thyroid; ALCL; NSCLC | | | E; L | Dom | T | NTRK1; ALK; ROS1 | | TPM3; ENSG00000143549; 7170 |

| | | | | | | | | | | | | | | | | |
|---------------|---|-------|----|---------|-----|--|-------------------|--|--|---|-----|-----|---|--|--|--|
| TPM4 | Tropomyosin 4 | 7171 | 19 | 19p13.1 | yes | | ALCL | | | L | Dom | T | ALK | | | 7171; P67936; ENSG00000167460; TPM4 |
| TPR | Translocated promoter region | 7175 | 1 | 1q25 | yes | | Papillary thyroid | | | E | Dom | T | NTRK1 | | | 7175; P12270; TPR |
| TRA@ | T cell receptor alpha locus | 6955 | 14 | 14q11.2 | yes | | T-ALL | | | L | Dom | T | ATL; OLIG2; MYC; TCL1A; TCL6; MTCP1; TCL6 | | | |
| TRAF7 | Tumour necrosis factor receptor-associated factor 7 | 84231 | 16 | 16p13.3 | yes | | Meningioma | | | O | Dom | Mis | | | | TRAF7; DKFZp586I021; RFWD1; Q6Q0C0; MGC7807; RNF119; 84231; ENSG00000131653 |
| TRB@ | T cell receptor beta locus | 6957 | 7 | 7q35 | yes | | T-ALL | | | L | Dom | T | HOX11; LCK; NOTCH1; TAL2; LYL1 | | | |
| TRD@ | T cell receptor delta locus | 6964 | 14 | 14q11 | yes | | T-cell leukaemia | | | L | Dom | T | TAL1; HOX11; TLX1; LMO1; LMO2; RANBP17 | | | |
| TRIM27 | Tripartite motif-containing 27 | 5987 | 6 | 6p22 | yes | | Papillary thyroid | | | E | Dom | T | RET | | | RFP; DASS-46L4_6; TRIM27; RNF76; ENSG00000234495; 5987; RFP |
| TRIM33 | Tripartite motif-containing 33 (PTC7; TIF1G) | 51592 | 1 | 1p13 | yes | | Papillary thyroid | | | E | Dom | T | RET | | | TRIM33; PTC7; TIF1G; RFG7; TIF1GAMMA; TIFGAMMA; FLJ32925; TF1G; Q9UPN9; 51592; ENSG00000197323 |

| | | | | | | | | | | | | | | | |
|---------------|--|------|----|-------------|-----|-----|--|---|----------------------|------|-----|-----------------|--------|--|---|
| TRIP11 | Thyroid hormone receptor interactor 11 | 9321 | 14 | 14q31-q32 | yes | | AML | | | L | Dom | T | PDGFRB | | TRIP11; Q15643; CEV14; Trip230; ENSG00000100815; 9321 |
| TRRAP | Transformation/transcription domain-associated protein | 8295 | 7 | q21.2-q22.1 | yes | | Melanoma | | | E | Dom | Mis | | | 8295; TR-AP; Tra1; STAF40; FLJ10671; PAF350/400; PAF400; Q9Y4A5; ENSG00000196367; TRRAP |
| TSC1 | Tuberous sclerosis 1 gene | 7248 | 9 | 9q34 | yes | yes | Renal cell carcinoma; bladder carcinoma | Hamartoma; renal cell carcinoma; tuberous sclerosis tuber | Tuberous sclerosis 1 | E; O | Rec | D; Mis; N; F; S | | | KIAA0243; hamartin; LAM; MGC86987; TSC; ENSG00000165699; 7248; TSC1 |
| TSC2 | Tuberous sclerosis 2 gene | 7249 | 16 | 16p13.3 | yes | yes | Pulmonary lymphangioliomyomatosis (LAM); renal angiomyolipoma and head and neck cancer | Hamartoma; renal cell carcinoma; tuberous sclerosis tuber | Tuberous sclerosis 2 | E; O | Rec | D; Mis; N; F; S | | | 7249; FLJ43106; TSC4; tuberin; LAM; ENSG00000103197; TSC2 |
| TSHR | Thyroid stimulating hormone receptor | 7253 | 14 | 14q31 | yes | yes | Toxic thyroid adenoma | Thyroid adenoma | | E | Dom | Mis | yes | Hereditary nonautoimmune hyperthyroidism; subclinical hypothyroidism | 7253; hTSHR-I; LGR3; MGC75129; ENSG00000165409; TSHR |

| | | | | | | | | | | | | | | | |
|--------------|--|--------|----|----------------|-----|-----|--------------------------------------|--------------------------------------|----------------------------|---------|--------------------|-----------------|--|--|--|
| TTL | Tubulin tyrosine ligase | 150465 | 2 | 2q13 | yes | | ALL | | | L | Dom | T | ETV6 | | 150465; 2410003M22Rik; MGC46235; Q8NG68; ENSG00000114999; TTL |
| U2AF1 | U2 small nuclear RNA auxiliary factor 1 | 7307 | 21 | 21q22.3 | yes | | CLL; MDS | | | L | Dom | Mis | | | 7307; ENSG00000160201; DKFZp313J1712; FP793; RN; RNU2AF1; U2AF35; U2AFBP; Q01081; U2AF1 |
| UBR5 | Ubiquitin protein ligase E3 component n-recognin 5 | 51366 | 8 | 8q22 | yes | | Mantle cell lymphoma | | | L | | | | | |
| USP6 | Ubiquitin specific peptidase 6 (Tre-2 oncogene) | 9098 | 17 | 17p13 | yes | | Aneurysmal bone cyst | | | M | Dom | T | COL1A1; CDH11; ZNF9; OMD; THRAP3 | | Tre-2; HRP1; TRE17; ENSG00000129204; 9098; USP6; TRE2 |
| VHL | Von Hippel-Lindau syndrome gene | 7428 | 3 | 3p25 | yes | yes | Renal; haemangioma; pheochromocytoma | Renal; haemangioma; pheochromocytoma | Von Hippel-Lindau syndrome | E; M; O | Rec | D; Mis; N; F; S | | | P40337; HRCA1; VHL1; RCA1; ENSG00000134086; 7428; VHL |
| VTI1A | Vesicle transport through interaction with t-snares homolog 1A | 143187 | 10 | 10q25.2 | yes | | Colorectal | | | E | Dom | T | TCF7L2 | | Vti1-rp2; VTI1A; 143187; ENSG00000151532; MVti1 |
| WAS | Wiskott-Aldrich syndrome | 7454 | X | Xp11.23-p11.22 | | | Lymphoma | Wiskott-Aldrich syndrome | | L | X-linked recessive | Mis; N; F; S | | | WAS; P42768; IMD2; THC; WASP; ENSG00000015285; 7454 |

| | | | | | | | | | | | | | | | |
|----------------|--|-------|----|------------|-----|-----|--|--|---|------------|-----|-----------------|--------|--|--|
| WHSC1 | Wolf-Hirschhorn syndrome candidate 1(MMSET) | 7468 | 4 | 4p16.3 | yes | | MM | | | L | Dom | T | IGH@ | | WHS; 7468; WHSC1_ENST00000382891; FLJ23286; KIAA1090; MGC176638; MMSET; REIIBP; TRX5; O96028; NSD2 |
| WHSC1L1 | Wolf-Hirschhorn syndrome candidate 1-like 1 (NSD3) | 54904 | 8 | 8p12 | yes | | AML | | | L | Dom | T | NUP98 | | 54904; ENSG00000147548; WHSC1L1 |
| WIF1 | WNT inhibitory factor 1 | 11197 | 12 | 12q14.3 | yes | | Pleomorphic salivary gland adenoma | | | E | Dom | T | HMGA2 | | 11197; WIF-1; ENSG00000156076; WIF1 |
| WRN | Werner syndrome (RECQL2) | 7486 | 8 | 8p12-p11.2 | | yes | | Osteosarcoma; meningioma; other tumour types | Werner syndrome | L; E; M; O | Rec | Mis; N; F; S | | | WRN; RECQL2; RECQ3; Q14191; ENSG00000165392; 7486 |
| WT1 | Wilms tumour 1 gene | 7490 | 11 | 11p13 | yes | yes | Wilms tumour; desmoplastic small round cell tumour | Wilms tumour | Denys-Drash syndrome; Frasier syndrome; familial Wilms tumour | O | Rec | D; Mis; N; F; S | EWSR1 | | 7490; WAGR; WIT-2; GUD; WT33; ENSG00000184937; WT1 |
| WWTR1 | WW domain containing transcription regulator 1 | 25937 | 3 | 3q23-q24 | yes | | Epithelioid haemangioma | | | M | Dom | T | CAMTA1 | | 25937; ENSG00000018408; DKFZP586I1419; TAZ; Q9GZV5; WWTR1 |

| | | | | | | | | | | | | | | | | |
|---------------|--|-------|----|-----------|-----|-----|-----------------------------|---|---------------------------|---|-----|--------------|----------------|-----|--|---|
| XPA | Xeroderma pigmentosum; complementation group A | 7507 | 9 | 9q22.3 | | yes | | Skin basal cell; skin squamous cell; melanoma | xeroderma pigmentosum (A) | E | Rec | Mis; N; F; S | | | 7507; XPAC; P23025; XPI; ENSG00000136936; XPA | |
| XPC | Xeroderma pigmentosum; complementation group C | 7508 | 3 | 3p25 | | yes | | Skin basal cell; skin squamous cell; melanoma | xeroderma pigmentosum (C) | E | Rec | Mis; N; F; S | | | 7508; XP3; XPCC; ENSG00000154767; XPC | |
| XPO1 | Exportin 1 (CRM1 homolog; yeast) | 7514 | 2 | 2p15 | yes | | CLL | | | L | Dom | Mis | | | 7514; DKFZp686B1823; CRM1; O14980; ENSG00000082898; XPO1 | |
| YWHAE | Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein; epsilon polypeptide (14-3-3 epsilon) | 7531 | 17 | 17p13.3 | yes | | Endometrial stromal sarcoma | | | M | Dom | T | NUTM2A; NUTM2B | yes | Miller-Dieker lissencephaly syndrome | 14-3-3E; P62258; KCIP1; MDCR; MDS; FLJ45465; 14-3-3 epsilon; ENSG00000108953; 7531; YWHAE |
| ZNF145 | Zinc finger protein 145 (PLZF) | 7704 | 11 | 11q23.1 | yes | | APL | | | L | Dom | T | RARA | | | Q05516; PLZF; ZNF145; ENSG00000109906; ZBTB16; 7704 |
| ZNF198 | Zinc finger protein 198 | 7750 | 13 | 13q11-q12 | yes | | MPN; NHL | | | L | Dom | T | FGFR1 | | | 7750; ZMYM2; Q9UBW7; ZNF198; MYM; FIM; RAMP; ENSG00000121741; ZNF198 |
| ZNF278 | Zinc finger protein 278 (ZSG) | 23598 | 22 | 22q12-q14 | yes | | Ewing sarcoma | | | M | Dom | T | EWSR1 | | | PATZ1; ENSG00000100105; 23598 |

| | | | | | | | | | | | | | | | |
|---------------|--|--------|----|---------------|-----|--|----------------------------|--|--|---|-----|---|--------------|--|---|
| ZNF331 | Zinc finger protein 331 | 55422 | 19 | 19q13.3-q13.4 | yes | | Follicular thyroid adenoma | | | E | Dom | T | ? | | 55422; Q9NQX6; ZNF463; RITA; ZNF361; ENSG00000130844; ZNF331 |
| ZNF384 | Zinc finger protein 384 (CIZ/NMP4) | 171017 | 12 | 12p13 | yes | | ALL | | | L | Dom | T | EWSR1; TAF15 | | 171017; ENSG00000126746; ZNF384 |
| ZNF521 | Zinc finger protein 521 | 25925 | 18 | 18q11.2 | yes | | ALL | | | L | Dom | T | PAX5 | | 25925; EHZF; Evi3; DKFZp564D0764; MGC142182; MGC142208; ENSG00000198795; ZNF521 |
| ZNF9 | Zinc finger protein 9 (a cellular retroviral nucleic acid binding protein) | 7555 | 3 | 3q21 | yes | | Aneurysmal bone cyst | | | M | Dom | T | USP6 | | 7555; P62633; CNBP; DM2; RNF163; ZNF9; ZNF9; ENSG00000169714 |
| ZRSR2 | Zinc finger (CCCH type); RNA-binding motif and serine/arginine rich 2 | 8233 | X | Xp22.1 | yes | | MDS; CLL | | | L | Rec | | | | |

Supplementary Table 2. Predicted targets of hsa-miR-181a-5p by DIANA microT v 5.0.

| Gene name | Full name | miTG score | Cancer gene |
|------------------|---|-------------------|--------------------|
| ABI1 | Abl-interactor 1 | 0.957 | √ |
| ABI2 | Abl-interactor 2 | 0.701 | √ |
| ABI3BP | ABI family, member 3 (NESH) binding protein | 0.81 | |
| ABRA | Actin-binding Rho activating protein | 0.711 | |
| AC010547.9 | Zinc finger protein 23 | 0.856 | |
| AC022415.1 | Zinc finger family member 788 | 0.877 | |
| AC130352.1 | Unknown miRNA gene | 0.939 | |
| ACOT11 | Acyl-CoA thioesterase 11 | 0.862 | |
| ADCK3 | aarF domain containing kinase 3 | 0.736 | |
| AFF4 | AF4/FMR2 family, member 4 | 0.703 | |
| AFTPH | Aftiphilin | 0.752 | |
| AGT | Angiotensinogen (serpin peptidase inhibitor, clade A, member 8) | 0.733 | |
| AHCTF1 | AT hook containing transcription factor 1 | 0.93 | |
| AKIRIN1 | Akirin 1 | 0.815 | |
| AKT3 | V-akt murine thymoma viral oncogene homolog 3 | 0.896 | |
| AL136419.1 | Uncharacterized protein C14orf167 | 0.712 | |
| AL137003.1 | ATXN1 protein Fragment | 0.79 | |
| AMOTL1 | Angiomotin like 1 | 0.757 | |
| ANGPT2 | Angiopoietin 2 | 0.802 | |
| ANKRD13C | Ankyrin repeat domain 13C | 0.97 | |
| ANKRD26 | Ankyrin repeat domain 26 | 0.716 | |
| ANO1 | Anoctamin 1, calcium activated chloride channel | 0.745 | |
| ARHGAP11A | Rho GTPase activating protein 11A | 0.713 | |
| ARHGAP26 | Rho GTPase activating protein 26 | 0.758 | |
| ARID2 | AT rich interactive domain 2 (ARID, RFX-like) | 0.742 | √ |
| ARIH2 | Ariadne RBR E3 ubiquitin protein ligase 2 | 0.707 | |
| ARMC8 | Armadillo repeat containing 8 | 0.88 | |
| ASAH2B | N-acylsphingosine amidohydrolase (non-lysosomal ceramidase) 2B | 0.857 | |
| ATM | ATM serine/threonine kinase | 0.93 | √ |

| | | | |
|-----------|--|-------|---|
| ATP1B1 | ATPase, Na ⁺ /K ⁺ transporting, b1 polypeptide | 0.992 | |
| ATP8B4 | ATPase, class I, type 8B, member 4 | 0.824 | |
| AVL9 | AVL9 homolog (<i>S. cerevisiae</i>) | 0.734 | |
| B3GALT5 | UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 5 | 0.826 | |
| BACH1 | BTB and CNC homology 1, basic leucine zipper transcription factor 1 | 0.758 | |
| BAG2 | BCL2-associated athanogene 2 | 0.759 | |
| BAI3 | Brain-specific angiogenesis inhibitor 3 | 0.977 | |
| BCAS1 | Breast carcinoma amplified sequence 1 | 0.727 | |
| BCL11B | B-cell CLL/lymphoma 11B (zinc finger protein) | 0.729 | √ |
| BCL2L11 | BCL2-like 11 (apoptosis facilitator) | 0.843 | |
| BCL6 | B-cell CLL/lymphoma 6 | 0.825 | √ |
| BCLAF1 | BCL2-associated transcription factor 1 | 0.823 | |
| BDP1 | B double prime 1, subunit of RNA polymerase III transcription initiation factor IIIB | 0.744 | |
| BEND4 | BEN domain containing 4 | 0.743 | |
| BHLHE40 | Basic helix-loop-helix family, member e40 | 0.984 | |
| BIRC6 | Baculoviral IAP repeat containing 6 | 0.98 | |
| BRAP | BRCA1 associated protein | 0.883 | |
| BRD1 | Bromodomain containing 1 | 0.869 | |
| C10orf131 | Chromosome 10 open reading frame 131 | 0.919 | |
| C14orf28 | Chromosome 14 open reading frame 28 | 0.844 | |
| C16orf87 | Chromosome 16 open reading frame 87 | 0.939 | |
| C18orf63 | Chromosome 18 open reading frame 63 | 0.702 | |
| C1orf98 | Long intergenic non-protein coding RNA 862 | 0.947 | |
| C21orf90 | Chromosome 21 open reading frame 90 | 0.826 | |
| C2orf69 | Chromosome 2 open reading frame 69 | 0.978 | |
| C4orf33 | Chromosome 4 open reading frame 33 | 0.72 | |
| C6orf62 | Chromosome 6 open reading frame 62 | 0.821 | |
| C9orf35 | CDNA FLJ23651 fis, clone COL08363CDNA FLJ23916 fis, clone COL00117 | 0.755 | |
| CACHD1 | Cache domain containing 1 | 0.862 | |
| CACUL1 | CDK2-associated, cullin domain 1 | 0.714 | |
| CADPS | Ca ⁺⁺ -dependent secretion activator | 0.888 | |
| CALB1 | Calbindin 1, 28 kDa | 0.963 | |

| | | | |
|---------|---|-------|---|
| CALCRL | Calcitonin receptor-like | 0.894 | |
| CALM1 | Calmodulin 1 (phosphorylase kinase, delta) | 0.898 | |
| CAMSAP1 | Calmodulin regulated spectrin-associated protein 1 | 0.786 | |
| CAMSAP2 | Calmodulin regulated spectrin-associated protein family, member 2 | 0.919 | |
| CARD11 | Caspase recruitment domain family, member 11 | 0.886 | √ |
| CBX5 | Chromobox homolog 5 | 0.809 | |
| CCDC132 | Coiled-coil domain containing 132 | 0.873 | |
| CCDC50 | Coiled-coil domain containing 50 | 0.83 | |
| CCDC6 | Coiled-coil domain containing 6 | 0.754 | √ |
| CCNJ | Cyclin J | 0.936 | |
| CCP110 | Centriolar coiled coil protein 110 kDa | 0.859 | |
| CDC40 | Cell division cycle 40 | 0.771 | |
| CDK8 | Cyclin-dependent kinase 8 | 0.704 | |
| CDKL2 | Cyclin-dependent kinase-like 2 (CDC2-related kinase) | 0.722 | |
| CDON | Cell adhesion associated, oncogene regulated | 0.918 | |
| CEBPG | CCAAT/enhancer binding protein (C/EBP), gamma | 0.944 | |
| CEP41 | Centrosomal protein 41 kDa | 0.806 | |
| CEP57L1 | Centrosomal protein 57 kDa-like 1 | 0.824 | |
| CEP85L | Centrosomal protein 85 kDa-like | 0.779 | |
| CFHR3 | Complement factor H-related 3 | 0.719 | |
| CHIC1 | Cysteine-rich hydrophobic domain 1 | 0.811 | |
| CHMP3 | Charged multivesicular body protein | 0.851 | |
| CHN1 | Chimerin 1 | 0.718 | √ |
| CLASP1 | Cytoplasmic linker associated protein 1 | 0.998 | |
| CLINT1 | Clathrin interactor 1 | 0.95 | |
| CLVS1 | Clavesin 1 | 0.943 | |
| COL4A1 | Collagen, type IV, alpha 1 | 0.717 | |
| COPS2 | COP9 signalosome subunit 2 | 0.94 | |
| CREB1 | cAMP responsive element binding protein 1 | 0.939 | √ |
| CREB5 | cAMP responsive element binding protein 5 | 0.963 | |
| CREBRF | CREB3 regulatory factor | 0.997 | |
| CRK | v-crk avian sarcoma virus CT10 oncogene homolog | 0.853 | |
| CSF2RB | Colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) | 0.872 | |

| | | | |
|----------------|---|-------|--|
| CTD-2192J16.17 | Zinc finger protein 709 | 0.918 | |
| CTTNBP2 | Cortactin binding protein 2 | 0.795 | |
| CUL5 | Cullin 5 | 0.972 | |
| CXorf40B | Chromosome X open reading frame 40B | 0.723 | |
| CYP11B1 | Cytochrome P450, family 11, subfamily B, polypeptide 1 | 0.806 | |
| CYP3A5 | Cytochrome P450, family 3, subfamily A, polypeptide 5 | 0.77 | |
| CYSLTR1 | Cysteinyl leukotriene receptor 1 | 0.701 | |
| DACT2 | Dishevelled-binding antagonist of β -catenin 2 | 0.712 | |
| DAZAP2 | DAZ associated protein 2 | 0.768 | |
| DBF4 | DBF4 zinc finger | 0.853 | |
| DCBLD2 | Discoidin, CUB and LCCL domain containing 2 | 0.872 | |
| DDI2 | DNA-damage inducible 1 homolog 2 (<i>S. cerevisiae</i>) | 0.919 | |
| DDIT4 | DNA-damage-inducible transcript 4 | 0.738 | |
| DDX20 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 20 | 0.819 | |
| DDX21 | DEAD (Asp-Glu-Ala-Asp) box helicase 21 | 0.76 | |
| DDX52 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 52 | 0.961 | |
| DERL1 | Derlin 1 | 0.816 | |
| DGKH | Diacylglycerol kinase, eta | 0.845 | |
| DIS3L | DIS3 like exosome 3'-5' exoribonuclease | 0.877 | |
| DLEU7 | Deleted in lymphocytic leukemia, 7 | 0.829 | |
| DLGAP2 | Discs, large (<i>Drosophila</i>) homolog-associated protein 2 | 0.956 | |
| DNAJC21 | DnaJ (Hsp40) homolog, subfamily C, member 21 | 0.928 | |
| DNAJC6 | DnaJ (Hsp40) homolog, subfamily C, member 6 | 0.72 | |
| DOCK10 | Dedicator of cytokinesis 10 | 0.844 | |
| DOK6 | Docking protein 6 | 0.727 | |
| DPY19L1 | Dpy-19-like 1 (<i>C. elegans</i>) | 0.865 | |
| DUSP5 | Dual specificity phosphatase 5 | 0.73 | |
| DYNC1LI2 | Dynein, cytoplasmic 1, light intermediate chain 2 | 0.85 | |
| EED | Embryonic ectoderm development | 0.731 | |
| EGR2 | Early growth response 2 | 0.716 | |
| EIF2C4 | Argonaute RISC catalytic component 4 | 0.852 | |
| EIF3F | Eukaryotic translation initiation factor 3, subunit F | 0.774 | |

| | | | |
|----------|---|-------|--|
| EN1 | Engrailed homeobox 1 | 0.877 | |
| ENTPD6 | Ectonucleoside triphosphate diphosphohydrolase 6 (putative) | 0.917 | |
| EPB41L3 | Erythrocyte membrane protein band 4.1-like 3 | 0.832 | |
| EPHA7 | EPH receptor A7 | 0.734 | |
| EPT1 | Ethanolaminephosphotransferase 1 | 0.77 | |
| ERLIN1 | ER lipid raft associated 1 | 0.803 | |
| EYA3 | EYA transcriptional coactivator and phosphatase 3 | 0.761 | |
| F2R | Coagulation factor II (thrombin) receptor | 0.737 | |
| FAM107B | Family with sequence similarity 107, member B | 0.718 | |
| FAM122B | Family with sequence similarity 122B | 0.767 | |
| FAM160A1 | Family with sequence similarity 160, member A1 | 0.834 | |
| FAM190A | Coiled-coil serine-rich protein 1 | 0.707 | |
| FAM190B | Coiled-coil serine-rich protein 2 | 0.858 | |
| FAM26E | Family with sequence similarity 26, member E | 0.752 | |
| FAM63B | Family with sequence similarity 63, member B | 0.798 | |
| FAM9C | Family with sequence similarity 9, member C | 0.965 | |
| FBXL17 | F-box and leucine-rich repeat protein 17 | 0.951 | |
| FBXO33 | F-box protein 33 | 0.993 | |
| FBXO43 | F-box protein 43 | 0.958 | |
| FBXO5 | F-box protein 5 | 0.824 | |
| FMNL2 | Formin-like 2 | 0.931 | |
| FOXP2 | Forkhead box P2 | 0.769 | |
| FRMD7 | FERM domain containing 7 | 0.76 | |
| FYTTD1 | Forty-two-three domain containing 1 | 0.729 | |
| FZD6 | Frizzled class receptor 6 | 0.823 | |
| G2E3 | G2/M-phase specific E3 ubiquitin protein ligase | 0.888 | |
| GAB1 | GRB2-associated binding protein 1 | 0.743 | |
| GAD2 | Glutamate decarboxylase 2 | 0.886 | |
| GANC | Glucosidase, alpha; neutral C | 0.846 | |
| GAPVD1 | GTPase activating protein and VPS9 domains 1 | 0.763 | |
| GATA6 | GATA binding protein 6 | 0.871 | |
| GCC2 | GRIP and coiled-coil domain containing 2 | 0.923 | |
| GGPS1 | Geranylgeranyl diphosphate synthase 1 | 0.918 | |

| | | | |
|--------------|---|--------------|----------|
| GHITM | Growth hormone inducible transmembrane protein | 0.96 | |
| GID4 | GID complex subunit 4 | 0.701 | |
| GLDN | Gliomedin | 0.82 | |
| GLS | Glutaminase | 0.987 | |
| GNAQ | Guanine nucleotide binding protein (G protein), q polypeptide | 0.967 | √ |
| GNG2 | Guanine nucleotide binding protein (G protein), gamma 2 | 0.743 | |
| GOT2 | Glutamic-oxaloacetic transaminase 2, mitochondrial | 0.925 | |
| GPCPD1 | Glycerophosphocholine phosphodiesterase GDE1 homolog (<i>S. cerevisiae</i>) | 0.93 | |
| GPR83 | G protein-coupled receptor 8 | 0.881 | |
| GRB10 | Growth factor receptor-bound protein 10 | 0.851 | |
| GRIA2 | Glutamate receptor, ionotropic, AMPA 2 | 0.896 | |
| GRK7 | G protein-coupled receptor kinase 7 | 0.903 | |
| GSTCD | Glutathione S-transferase, C-terminal domain containing | 0.818 | |
| GTPBP3 | GTP binding protein 3 (mitochondrial) | 0.781 | |
| HAO1 | Hydroxyacid oxidase (glycolate oxidase) 1 | 0.796 | |
| HCN1 | Hyperpolarization activated cyclic nucleotide-gated potassium channel 1 | 0.838 | |
| HHIP | Hedgehog interacting protein | 0.807 | |
| HIC2 | Hypermethylated in cancer 2 | 0.912 | |
| HMCN1 | Hemicentin 1 | 0.918 | |
| HMGA2 | High mobility group AT-hook 2 | 0.764 | √ |
| HMGCR | 3-Hydroxy-3-methylglutaryl-CoA reductase | 0.718 | |
| HOXA1 | Homeobox A1 | 0.929 | |
| HOXD1 | Homeobox D1 | 0.909 | |
| HSDL2 | Hydroxysteroid dehydrogenase like 2 | 0.753 | |
| HSPA4L | Heat shock 70 kDa protein 4-like | 0.756 | |
| HSPA5 | Heat shock 70 kDa protein 5 (glucose-regulated protein, 78 kDa) | 0.81 | |
| IGDCC3 | Immunoglobulin superfamily, DCC subclass, member 3 | 0.718 | |
| IGF2BP2 | Insulin-like growth factor 2 mRNA binding protein 2 | 0.964 | |
| IKZF5 | IKAROS family zinc finger 5 (Pegasus) | 0.952 | |
| ING5 | Inhibitor of growth family, member 5 | 0.898 | |
| INO80C | INO80 complex subunit C | 0.836 | |
| IRF2BPL | Interferon regulatory factor 2 binding protein-like | 0.88 | |
| JMJD1C | Jumonji domain containing 1C | 0.856 | |

| | | | |
|----------|--|-------|---|
| KCNMA1 | Potassium large conductance calcium-activated channel, subfamily M, alpha member 1 | 0.804 | |
| KDM3A | Lysine (K)-specific demethylase 3A | 0.896 | |
| KIAA1644 | KIAA1644 | 0.809 | |
| KIF3A | Kinesin family member 3A | 0.903 | |
| KL | Klotho | 0.786 | |
| KLF15 | Kruppel-like factor 15 | 0.877 | |
| KLF6 | Kruppel-like factor 6 | 0.977 | |
| KLHL2 | Kelch-like family member 2 | 0.817 | |
| KLHL5 | Kelch-like family member 5 | 0.995 | |
| KSR1 | Kinase suppressor of ras 1 D110 | 0.943 | |
| LCOR | Ligand dependent nuclear receptor corepressor | 0.943 | |
| LCP1 | Lymphocyte cytosolic protein 1 (L-plastin) | 0.738 | √ |
| LGI2 | Leucine-rich repeat LGI family, member 2 | 0.718 | |
| LIN28B | Lin-28 homolog B (<i>C. elegans</i>) | 0.971 | |
| LMAN1 | Lectin, mannose-binding, 1 | 0.958 | |
| LMO3 | LIM domain only 3 (rhombotin-like 2) | 0.945 | |
| LPGAT1 | Lysophosphatidylglycerol acyltransferase 1 | 0.735 | |
| LRBA | LPS-responsive vesicle trafficking, beach and anchor containing | 0.986 | |
| LRP12 | Low density lipoprotein receptor-related protein 12 | 0.81 | |
| LY75 | Lymphocyte antigen 75 | 0.799 | |
| MAF | V-maf avian musculoaponeurotic fibrosarcoma oncogene homolog | 0.702 | √ |
| MAOA | Monoamine oxidase A | 0.754 | |
| MAP1B | Microtubule-associated protein 1B | 0.991 | |
| MAP2K1 | Mitogen-activated protein kinase kinase 1 | 0.833 | √ |
| MARCH2 | Mitochondrial amidoxime reducing component 2 | 0.788 | |
| MB21D1 | Mab-21 domain containing 1 | 0.865 | |
| MBLAC2 | Metallo-beta-lactamase domain containing 2 | 0.743 | |
| MBNL1 | Muscleblind-like splicing regulator 1 | 0.803 | |
| MBNL2 | Muscleblind-like splicing regulator 2 | 0.789 | |
| MBOAT2 | Membrane bound O-acyltransferase domain containing 2 | 0.919 | |
| MCC | Mutated in colorectal cancers | 0.868 | |
| MCTP1 | Multiple C2 domains, transmembrane 1 | 0.861 | |
| MDFIC | MyoD family inhibitor domain containing | 0.705 | |

| | | | |
|----------|---|-------|---|
| MED26 | Mediator complex subunit 26 | 0.897 | |
| METAP1 | Methionyl aminopeptidase 1 | 0.977 | |
| METTL20 | Methyltransferase like 20 | 0.864 | |
| MFAP3L | Microfibrillar-associated protein 3-like | 0.807 | |
| MFSD6 | Major facilitator superfamily domain containing 6 | 0.867 | |
| MGA | MGA, MAX dimerization protein | 0.806 | |
| MIA2 | Melanoma inhibitory activity 2 | 0.91 | |
| MIER3 | Mesoderm induction early response 1, family member 3 | 0.954 | |
| MLLT10 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 10 | 0.969 | √ |
| MME | Membrane metallo-endopeptidase | 0.755 | |
| MMP16 | Matrix metallopeptidase 16 (membrane-inserted) | 0.848 | |
| MMP8 | Matrix metallopeptidase 8 (neutrophil collagenase) | 0.727 | |
| MOB4 | MOB family member 4, phocein | 0.755 | |
| MRPS35 | Mitochondrial ribosomal protein S35 | 0.785 | |
| MS4A1 | Membrane-spanning 4-domains, subfamily A, member 1 | 0.857 | |
| MSI2 | Musashi RNA-binding protein 2 | 0.879 | √ |
| MTF2 | Metal response element binding transcription factor 2 | 0.991 | |
| MTUS1 | Microtubule associated tumor suppressor 1 | 0.774 | |
| MUC22 | Mucin 22 | 0.764 | |
| MUC7 | Mucin 7, secreted | 0.94 | |
| MYH10 | Myosin, heavy chain 10, non-muscle | 0.756 | |
| NAALADL2 | N-acetylated alpha-linked acidic dipeptidase-like 2 | 0.723 | |
| NAPB | N-ethylmaleimide-sensitive factor attachment protein, beta | 0.762 | |
| NCOR1 | Nuclear receptor corepressor 1 | 0.914 | √ |
| NDUFAF4 | NADH dehydrogenase (ubiquinone) complex I, assembly factor 4 | 0.724 | |
| NFYB | Nuclear transcription factor Y, bet | 0.845 | |
| NHLRC2 | NHL repeat containing 2 | 0.882 | |
| NLN | Neurolysin (metallopeptidase M3 family) | 0.91 | |
| NMT2 | <i>N</i> -myristoyltransferase 2 | 0.992 | |
| NOTCH2 | Notch 2 | 0.883 | √ |
| NPHP1 | Nephronophthisis 1 (juvenile) | 0.754 | |
| NR4A3 | Nuclear receptor subfamily 4, group A, member 3 | 0.801 | √ |

| | | | |
|---------|--|-------|---|
| NRCAM | Neuronal cell adhesion molecule | 0.762 | |
| NRGN | Neurogranin (protein kinase C substrate, RC3) | 0.852 | |
| NT5C3 | 5'-nucleotidase, cytosolic IIIA | 0.81 | |
| NUDT12 | Nudix (nucleoside diphosphate linked moiety X)-type motif 12 | 0.894 | |
| NUDT19 | Nudix (nucleoside diphosphate linked moiety X)-type motif 19 | 0.713 | |
| NUFIP1 | Nuclear fragile X mental retardation protein interacting protein 1 | 0.868 | |
| ODF2L | Outer dense fiber of sperm tails 2-like | 0.805 | |
| OTOGL | Otogelin-like | 0.755 | |
| PALM2 | Paralemmin 2 | 0.953 | |
| PAPD5 | PAP associated domain containing 5 | 0.997 | |
| PARK2 | Parkin RBR E3 ubiquitin protein ligase | 0.951 | |
| PARP11 | Poly (ADP-ribose) polymerase family, member 11 | 0.831 | |
| PAX5 | Paired box 5 | 0.979 | √ |
| PAX9 | Paired box 9 | 0.736 | |
| PBX1 | Pre-B-cell leukemia homeobox 1 | 0.83 | √ |
| PCDHA2 | Protocadherin alpha 2 | 0.723 | |
| PCDHA3 | Protocadherin alpha 3 | 0.724 | |
| PCDHA4 | Protocadherin alpha 4 | 0.723 | |
| PCDHA6 | Protocadherin alpha | 0.724 | |
| PCGF3 | Polycomb group ring finger 3 | 0.753 | |
| PCGF5 | Polycomb group ring finger 5 | 0.81 | |
| PCID2 | PCI domain containing 2 | 0.805 | |
| PCNP | PEST proteolytic signal containing nuclear protein | 0.914 | |
| PCYOX1 | Preylcysteine oxidase 1 | 0.81 | |
| PDE1C | Phosphodiesterase 1C, calmodulin-dependent 70kDa | 0.757 | |
| PDE8B | Phosphodiesterase 8B | 0.702 | |
| PDIK1L | PDLIM1 interacting kinase 1 like | 0.776 | |
| PEAK1 | Pseudopodium-enriched atypical kinase 1 | 0.907 | |
| PGM2L1 | Phosphoglucomutase 2-like 1 | 0.729 | |
| PHACTR1 | Phosphatase and actin regulator 1 | 0.857 | |
| PHKA1 | Phosphorylase kinase, alpha 1 (muscle) | 0.72 | |
| PHLPP2 | PH domain and leucine rich repeat protein phosphatase 2 | 0.745 | |
| PHOX2B | Paired-like homeobox 2b | 0.881 | √ |

| | | | |
|----------|--|-------|---|
| PIAS2 | Protein inhibitor of activated STAT, 2 | 0.779 | |
| PIAS3 | Protein inhibitor of activated STAT, 3 | 0.7 | |
| PIK3C3 | Phosphatidylinositol 3-kinase, catalytic subunit type 3 | 0.706 | |
| PIK3R3 | Phosphoinositide-3-kinase, regulatory subunit 3 (g) | 0.907 | |
| PKD2 | Polycystic kidney disease 2 (autosomal dominant) | 0.907 | |
| PKD2L2 | Polycystic kidney disease 2-like 2 | 0.739 | |
| PKHD1 | Polycystic kidney and hepatic disease 1 (autosomal recessive) | 0.933 | |
| PKNOX1 | PBX/knotted 1 homeobox 1 | 0.869 | |
| PLAU | Plasminogen activator, urokinase | 0.772 | |
| PLCL2 | Phospholipase C-like 2 | 0.972 | |
| PLEKHA1 | Pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 1 | 0.704 | |
| PMS1 | PMS1 postmeiotic segregation increased 1 (<i>S. cerevisiae</i>) | 0.79 | √ |
| PNRC2 | Proline-rich nuclear receptor coactivator 2 | 0.853 | |
| PPARGC1A | Peroxisome proliferator-activated receptor gamma, coactivator 1 alpha | 0.823 | |
| PPM1A | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1A | 0.83 | |
| PPP1R9A | Protein phosphatase 1, regulatory subunit 9A | 0.758 | |
| PPP2R5E | Protein phosphatase 2, regulatory subunit B', epsilon isoform | 0.87 | |
| PRDM1 | PR domain containing 1, with ZNF domain | 0.883 | √ |
| PRDM5 | PR domain containing 5 | 0.751 | |
| PREX2 | Phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 2 | 0.784 | |
| PRLR | Prolactin receptor | 0.957 | |
| PRRG4 | Proline rich Gla (G-carboxyglutamic acid) 4 (transmembrane) | 0.913 | |
| PSG11 | Pregnancy-specific b1-glycoprotein 11 Precursor | 0.891 | |
| PSMC2 | Proteasome (prosome, macropain) 26S subunit, ATPase, 2 | 0.882 | |
| PTBP2 | Polypyrimidine tract binding protein 2 | 0.742 | |
| PTEN | Phosphatase and tensin homolog | 0.883 | √ |
| PTGER3 | Prostaglandin E receptor 3 (subtype EP3) | 0.76 | |
| PTGS2 | Prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase) | 0.895 | |
| PTPN3 | Protein tyrosine phosphatase, non-receptor type 3 | 0.722 | |
| PTPRT | Protein tyrosine phosphatase, receptor type, T | 0.879 | |
| PUM1 | Pumilio RNA-binding family member 1 | 0.945 | |

| | | | |
|--------------|--|-------|--|
| RAB27B | RAB27B, member RAS oncogene family | 0.857 | |
| RAB8B | RAB8B, member RAS oncogene family | 0.822 | |
| RABGEF1 | RAB guanine nucleotide exchange factor (GEF) 1 | 0.772 | |
| RABL5 | Intraflagellar transport 22 | 0.779 | |
| RAD23B | RAD23 homolog B (<i>S. cerevisiae</i>)+B346 | 0.794 | |
| RALGAPA2 | Ral GTPase activating protein, alpha subunit 2 (catalytic) | 0.801 | |
| RAP1A | RAP1A, member of RAS oncogene family | 0.827 | |
| RASSF1 | Ras association (RalGDS/AF-6) domain family member 1 | 0.772 | |
| RASSF2 | Ras association (RalGDS/AF-6) domain family member 2 | 0.789 | |
| RASSF8 | Ras association (RalGDS/AF-6) domain family (N-terminal) member 8 | 0.779 | |
| RBM26 | RNA binding motif protein 26 | 0.981 | |
| RBM46 | RNA binding motif protein 46 | 0.933 | |
| RCN2 | Reticulocalbin 2, EF-hand calcium binding domain | 0.716 | |
| REPS2 | RALBP1 associated Eps domain containing 2 | 0.989 | |
| RFTN2 | Raftlin family member 2 | 0.762 | |
| RFX2 | Regulatory factor X, 2 (influences HLA class II expression) | 0.786 | |
| RIMBP3B | RIMS binding protein 3B | 0.723 | |
| RLF | Rearranged L-myc fusion | 0.994 | |
| RNF6 | Ring finger protein (C3H2C3 type) 6 | 0.953 | |
| RNF7 | Ring finger protein 7 | 0.742 | |
| ROCK2 | Rho-associated, coiled-coil containing protein kinase 2 | 0.757 | |
| RP3-324N14.2 | Small leucine-rich protein 1 | 0.939 | |
| RPL23 | Ribosomal protein L23 | 0.87 | |
| RPS6KB1 | Ribosomal protein S6 kinase, 70 kDa, polypeptide 1 | 0.94 | |
| RSBN1 | Round spermatid basic protein 1 | 0.745 | |
| RSPO2 | R-spondin 2 | 0.928 | |
| SAMD4A | Sterile alpha motif domain containing 4A | 0.947 | |
| SBNO1 | Strawberry notch homolog 1 (<i>Drosophila</i>) | 0.769 | |
| SEMA4G | Sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4G | 0.933 | |
| SEN1 | SUMO1/sentrin specific peptidase 1 | 0.828 | |
| SEN2 | SUMO1/sentrin/SMT3 specific peptidase 2 | 0.876 | |
| SEN7 | SUMO1/sentrin specific peptidase 7 | 0.751 | |

| | | | |
|----------|---|-------|--|
| SERP1 | Stress-associated endoplasmic reticulum protein 1 | 0.801 | |
| SERTAD2 | SERTA domain containing 2 | 0.824 | |
| SESN3 | Sestrin 3 | 0.992 | |
| SETP8 | Septin 8 | 0.827 | |
| SHROOM3 | Shroom family member 3 | 0.708 | |
| SIAE | Sialic acid acetyltransferase | 0.808 | |
| SKAP2 | Src kinase associated phosphoprotein 2 | 0.767 | |
| SKP1 | S-phase kinase-associated protein 1 | 0.838 | |
| SLC11A1 | Solute carrier family 11 (proton-coupled divalent metal ion transporter), member 1 | 0.725 | |
| SLC12A2 | Solute carrier family 12 (sodium/potassium/chloride transporter), member 2 | 0.764 | |
| SLC24A3 | Solute carrier family 24 (sodium/potassium/calcium exchanger), member 3 | 0.771 | |
| SLC25A25 | Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25 | 0.754 | |
| SLC25A37 | Solute carrier family 25 (mitochondrial iron transporter), member 37 | 0.894 | |
| SLC26A4 | Solute carrier family 26 (anion exchanger), member 4 | 0.837 | |
| SLC2A3 | Solute carrier family 2 (facilitated glucose transporter), member 3 | 0.982 | |
| SLC38A11 | Solute carrier family 38, member 11 | 0.832 | |
| SLC38A2 | Solute carrier family 38, member 2 | 0.876 | |
| SLC6A6 | Solute carrier family 6 | 0.875 | |
| SLC7A11 | Solute carrier family 7 (anionic amino acid transporter light chain, xc- system), member 11 | 0.863 | |
| SLC7A2 | Solute carrier family 7 (cationic amino acid transporter, y+ system), member 2 | 0.772 | |
| SLITRK1 | SLIT and NTRK-like family, member 1 | 0.982 | |
| SLITRK2 | SLIT and NTRK-like family, member 2 | 0.927 | |
| SMAD5 | SMAD family member 5 | 0.734 | |
| SMG1 | SMG1 phosphatidylinositol 3-kinase-related kinase | 0.742 | |
| SMG7 | SMG7 nonsense mediated mRNA decay factor | 0.769 | |
| SMN1 | Survival of motor neuron 1, telomeric | 0.882 | |
| SNN | Stannin | 0.954 | |
| SNTN | Sentan, cilia apical structure protein | 0.754 | |
| SNX5 | Sorting nexin 5 | 0.753 | |
| SOCS3 | Suppressor of cytokine signaling 3 | 0.76 | |
| SORT1 | Sortilin 1 | 0.703 | |
| SOS1 | Son of sevenless homolog 1 (Drosophila) | 0.797 | |

| | | | |
|---------|--|-------|---|
| SOWAHA | Sosondowah ankyrin repeat domain family member A | 0.954 | |
| SOX5 | SRY (sex determining region Y)-box 5 | 0.872 | |
| SPAG16 | Sperm associated antigen 16 | 0.781 | |
| SPI1 | Spi-1 proto-oncogene | 0.885 | |
| SPP1 | Secreted phosphoprotein 1 | 0.98 | |
| SRFBP1 | Serum response factor binding protein 1 | 0.763 | |
| SRGN | Serglycin | 0.794 | |
| SS18L1 | Synovial sarcoma translocation gene on chromosome 18-like 1 | 0.914 | √ |
| SS18L2 | Synovial sarcoma translocation gene on chromosome 18-like 2 | 0.901 | |
| STAG2 | Stromal antigen 2 | 0.721 | √ |
| STEAP4 | STEAP family member 4 | 0.814 | |
| STT3B | STT3B, subunit of the oligosaccharyltransferase complex (catalytic) | 0.792 | |
| STX7 | Syntaxin 7 | 0.856 | |
| STXBP4 | Syntaxin binding protein 4 | 0.82 | |
| SUDS3 | Suppressor of defective silencing 3 homolog (<i>S. cerevisiae</i>) | 0.725 | |
| SVIP | Small VCP/p97-interacting protein | 0.875 | |
| SYNC | Syncoilin, intermediate filament protein | 0.716 | |
| SYNRG | Synergin, gamma | 0.718 | |
| TACSTD2 | Tumor-associated calcium signal transducer 2 | 0.801 | |
| TAOK1 | TAO kinase 1 | 0.822 | |
| TBC1D14 | TBC1 domain family, member 14 | 0.803 | |
| TBC1D9 | TBC1 domain family, member 9 (with GRAM domain) | 0.768 | |
| TBL1X | Transducin (beta)-like 1X-linked | 0.745 | |
| TBPL1 | TBP-like 1 | 0.949 | |
| TCEANC | Transcription elongation factor A (SII) N-terminal and central domain containing | 0.842 | |
| TCEB1 | Transcription elongation factor B (SIII), polypeptide 1 (15 kDa, elongin C) | 0.768 | |
| TEAD1 | TEA domain family member 1 | 0.872 | |
| TG | Thyroglobulin | 0.8 | |
| TGFBI | Transforming growth factor, beta-induced, 68 kDa | 0.757 | |
| THEMIS | Thymocyte selection associated | 0.781 | |
| THUMPD1 | THUMP domain containing 1 | 0.872 | |
| TIMP3 | TIMP metalloproteinase inhibitor 3 | 0.976 | |
| TLK2 | Tousled-like kinase 2 | 0.765 | |

| | | | |
|---------------|--|--------------|----------|
| TLL2 | Tolloid-like 2 | 0.728 | |
| TMED4 | Transmembrane emp24 protein transport domain containing 4 | 0.871 | |
| TMEM123 | Transmembrane protein 123 | 0.739 | |
| TMEM131 | Transmembrane protein 131 | 0.992 | |
| TMEM135 | Transmembrane protein 135 | 0.844 | |
| TMEM178B | Transmembrane protein 178B | 0.834 | |
| TMEM194A | Transmembrane protein 194A | 0.901 | |
| TMEM26 | Transmembrane protein 26 | 0.88 | |
| TMEM30A | Transmembrane protein 30A | 0.785 | |
| TMEM48 | NDC1 transmembrane nucleoporin | 0.906 | |
| TNFRSF11A | Tumor necrosis factor receptor superfamily, member 11a, NFKB activator | 0.922 | |
| TNIK | TRAF2 and NCK interacting kinase | 0.936 | |
| TNKS | Tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase | 0.758 | |
| TNS1 | Tensin 1 | 0.884 | |
| TPH2 | Tryptophan hydroxylase 2 | 0.782 | |
| TPRX1 | Tetra-peptide repeat homeobox 1 | 0.935 | |
| TREML4 | Triggering receptor expressed on myeloid cells-like 4 | 0.753 | |
| TRIM2 | Tripartite motif containing 2 | 0.995 | |
| TRIM33 | Tripartite motif containing 33 | 0.798 | √ |
| TRNP1 | TMF1-regulated nuclear protein | 0.751 | |
| TRPC6 | Transient receptor potential cation channel, subfamily C, member 6 | 0.701 | |
| TSMF | Ts translation elongation factor, mitochondrial | 0.721 | |
| TTBK1 | Tau tubulin kinase 1 | 0.93 | |
| TUBAL3 | Tubulin, alpha-like 3 | 0.758 | |
| TWISTNB | TWIST neighbor | 0.844 | |
| TYW5 | tRNA-yW synthesizing protein 5 | 0.718 | |
| UBE2W | Ubiquitin-conjugating enzyme E2W (putative) | 0.843 | |
| UBR1 | Ubiquitin protein ligase E3 component n-recognin 1 | 0.707 | |
| UBR3 | Ubiquitin protein ligase E3 component n-recognin 3 (putative) | 0.721 | |
| UGT8 | UDP glycosyltransferase 8 | 0.805 | |
| USP15 | Ubiquitin specific peptidase 15 | 0.896 | |
| USP6NL | USP6 N-terminal like | 0.768 | |
| VCAM1 | Vascular cell adhesion molecule 1 | 0.759 | |

| | | | |
|---------|---|-------|---|
| VCY | Variable charge, Y-linked 1B | 0.852 | |
| VIP | Vasoactive intestinal peptide | 0.848 | |
| VPS33B | Vacuolar protein sorting 33 homolog B (yeast) | 0.747 | |
| WASL | Wiskott-Aldrich syndrome-like | 0.964 | |
| WDR75 | WD repeat domain 75 | 0.945 | |
| WDR82 | WD repeat domain 82 | 0.873 | |
| WDR96 | Cilia and flagella associated protein 43 | 0.893 | |
| WHAMM | WAS protein homolog associated with actin, golgi membranes and microtubules | 0.936 | |
| WHSC1 | Wolf-Hirschhorn syndrome candidate 1 | 0.704 | √ |
| WIF1 | WNT inhibitory factor 1 | 0.947 | √ |
| XKR3 | XK, Kell blood group complex subunit-related family, member 3 | 0.849 | |
| XPO1 | Exportin 1 | 0.939 | √ |
| XPO7 | Exportin 7 | 0.806 | |
| YTHDC2 | YTH domain containing 2 | 0.952 | |
| ZBTB34 | Zinc finger and BTB domain containing 34 | 0.872 | |
| ZBTB4 | Zinc finger and BTB domain containing 4 | 0.975 | |
| ZDHHC17 | Zinc finger, DHHC-type containing 17 | 0.857 | |
| ZFP3 | ZFP3 zinc finger protein | 0.791 | |
| ZFP30 | ZFP30 zinc finger protein | 0.849 | |
| ZFP36L1 | ZFP36 ring finger protein-like 1 | 0.979 | |
| ZFP37 | ZFP37 zinc finger protein | 0.969 | |
| ZFP90 | ZFP90 zinc finger protein | 0.982 | |
| ZNF107 | Zinc finger protein 107 | 0.717 | |
| ZNF12 | Zinc finger protein 12 | 0.953 | |
| ZNF131 | Zinc finger protein 131 | 0.949 | |
| ZNF146 | Zinc finger protein 146 | 0.737 | |
| ZNF148 | Zinc finger protein 148 | 0.842 | |
| ZNF184 | Zinc finger protein 184 | 0.871 | |
| ZNF24 | Zinc finger protein 24 | 0.713 | |
| ZNF266 | Zinc finger protein 266 | 0.944 | |
| ZNF268 | Zinc finger protein 268 | 0.997 | |
| ZNF274 | Zinc finger protein 274 | 0.741 | |
| ZNF292 | Zinc finger protein 292 | 0.908 | |

| | | | |
|--------|-------------------------------|-------|--|
| ZNF347 | Zinc finger protein 347 | 0.737 | |
| ZNF419 | Zinc finger protein 419 | 0.792 | |
| ZNF432 | Zinc finger protein 432 | 0.811 | |
| ZNF436 | Zinc finger protein 436 | 0.839 | |
| ZNF440 | Zinc finger protein 440 | 0.948 | |
| ZNF441 | Zinc finger protein 441 | 0.989 | |
| ZNF442 | Zinc finger protein 442 | 0.767 | |
| ZNF493 | Zinc finger protein 493 | 0.889 | |
| ZNF510 | Zinc finger protein 510 | 0.911 | |
| ZNF514 | Zinc finger protein 514 | 0.879 | |
| ZNF527 | Zinc finger protein 527 | 0.993 | |
| ZNF546 | Zinc finger protein 546 | 0.873 | |
| ZNF551 | Zinc finger protein 551 | 0.755 | |
| ZNF567 | Zinc finger protein 567 | 0.859 | |
| ZNF570 | Zinc finger protein 570 | 1 | |
| ZNF583 | Zinc finger protein 583 | 0.875 | |
| ZNF594 | Zinc finger protein 594 | 0.966 | |
| ZNF610 | Zinc finger protein 610 | 0.71 | |
| ZNF638 | Zinc finger protein 638 | 0.79 | |
| ZNF677 | Zinc finger protein 677 | 0.934 | |
| ZNF704 | Zinc finger protein 704 | 0.997 | |
| ZNF709 | Zinc finger protein 709 | 0.942 | |
| ZNF711 | Zinc finger protein 711 | 0.796 | |
| ZNF717 | Zinc finger protein 717 | 0.982 | |
| ZNF720 | Zinc finger protein 720 | 0.977 | |
| ZNF74 | Zinc finger protein 74 | 0.751 | |
| ZNF770 | zinc finger protein 770 | 0.733 | |
| ZNF776 | Zinc finger protein 776 | 0.85 | |
| ZNF781 | Zinc finger protein 781 | 1 | |
| ZNF788 | Zinc finger family member 788 | 0.996 | |
| ZNF799 | Zinc finger protein 799 | 0.997 | |
| ZNF841 | Zinc finger protein 841 | 0.736 | |
| ZNF844 | Zinc finger protein 844 | 0.951 | |

| | | | |
|---------|--|-------|--|
| ZNF846 | Zinc finger protein 846 | 0.994 | |
| ZNF850 | Zinc finger protein 850 | 0.881 | |
| ZNRF2 | Zinc and ring finger 2 | 0.88 | |
| ZSCAN23 | Zinc finger and SCAN domain containing 23 | 0.877 | |
| ZYG11B | Zyg-11 family member B, cell cycle regulator | 0.705 | |

Supplementary Table 3. Predicted targets of hsa-miR-181a-5p by DIANA microT v 5.0.

| Gene symbol | Full name | Alias | Cancer gene |
|-------------|--|---|-------------|
| A2BP1 | | | |
| A2ML1 | Alpha-2-macroglobulin-like 1 | CPAMD9 | |
| AADACL3 | Arylacetamide deacetylase-like 3 | RP11-474O21.3 | |
| AAK1 | AP2 associated kinase 1 | RP11-427H3.3 | |
| AANAT | Aralkylamine N-acetyltransferase | DSPS, SNAT | |
| AASDH | Amino adipate-semialdehyde dehydrogenase | HSPC318, ACSF4, LYS2, NRPS1098, NRPS998 | |
| AASDHPPT | Amino adipate-semialdehyde dehydrogenase- chromophore-thioester transferase | CGI-80, AASD-PPT, LYS2, LYS5 | |
| AASS | Amino adipate-semialdehyde synthase | LKR/SDH, LKRSDH, LORS DH | |
| ABCA1 | ATP-binding cassette, sub-family A (ABC1), member 1 | ABC-1, ABC1, CERP, HDLDT1, TGD | |
| ABCA10 | ATP-binding cassette, sub-family A (ABC1), member 10 | EST698739 | |
| ABCA11P | ATP-binding cassette, sub-family A (ABC1), member 11 | | |
| ABCA13 | ATP-binding cassette, sub-family A (ABC1), member 13 | | |
| ABCA5 | ATP-binding cassette, sub-family A (ABC1), member 5 | ABC13, EST90625 | |
| ABCA6 | ATP-binding cassette, sub-family A (ABC1), member 6 | EST155051 | |
| ABCB1 | ATP-binding cassette, sub-family B (ABC2/ABC3) member 1 | ABC20, CD243, CLCS, GP170, MDR1, P-GP, PGY1 | |
| ABCB10 | ATP-binding cassette, sub-family B (ABC2/ABC3) member 10 | EST20237, M-ABC2, MTABC2 | |
| ABCB11 | ATP-binding cassette, sub-family B (ABC2/ABC3) member 11 | ABC16, BRIC2, BSEP, PFIC-2, PFIC2, PGY4, SPGP | |
| ABCB5 | ATP-binding cassette, sub-family B (ABC2/ABC3) member 5 | tcag7.1091alpha, ABCB5beta, EST422562, ABCB5 | |
| ABCD3 | ATP-binding cassette, sub-family D (ALD), member 3 | ABC43, PMP70, PXMP1, ZWS2 | |
| ABCG5 | ATP-binding cassette, sub-family G (WHITE) member 5 | STSL | |
| ABHD12B | Abhydrolase domain containing 12B | BEM46L3, C14orf29, c14_5314 | |
| ABHD13 | Abhydrolase domain containing 13 | RP11-153I24.2, BEM46L1, C13orf6, bA153I24.2 | |
| ABHD15 | Abhydrolase domain containing 15 | UNQ6510/PRO21435 | |
| ABHD2 | Abhydrolase domain containing 2 | HS1-2, LABH2, PHPS1-2 | |
| ABHD3 | Abhydrolase domain containing 3 | LABH3 | |
| ABHD4 | Abhydrolase domain containing 4 | ABH4 | |
| ABHD5 | Abhydrolase domain containing 5 | CGI-58, CDS, CGI58, IECN2, NCIE2 | |
| ABI1 | Abl-interactor 1 | NP15-101111.4, ADF1, ADEL14, ESD1, NAT101, SSH2BP, SSH2BP1 | √ |
| ABI2 | Abl-interactor 2 | ADP1, ADF1, ADF1C, SSH2BP2, argD11, argD11A, SSH2BP, ADF2 | |
| ABI3BP | ADP family, member 3 (NESH) binding protein | NESHBP, TARSH | |
| ABL1 | ABL proto-oncogene 1, non-receptor tyrosine kinase | NP11-65521.1, ABL, JTK7, UCI/abl, C-ABL, C-ABL1, c150-abl | √ |

| | | | |
|--------|---|--|---|
| ABL2 | ABL proto-oncogene 2, non-receptor tyrosine kinase | RP11-177A2.3, ABL1, ARG | v |
| ABLIM1 | Actin binding LIM protein 1 | RP11-317F20.1, ABLIM, LIMAB1, LIMATIN, abLIM-1 | |
| ABRA | Actin-binding Rho activating protein | STARS | |
| ABTB2 | Ankyrin repeat and BTB (POZ) domain containing 2 | RP1-53C18.4A, BTBD22, ABTB2 | |
| ACACB | Acetyl-CoA carboxylase beta | ACC2, ACCB, HACC275 | |
| ACAD11 | Acyl-CoA dehydrogenase family, member 11 | ACAD-11 | |
| ACAD8 | Acyl-CoA dehydrogenase family, member 8 | ACAD-8, ARC42 | |
| ACADL | Acyl-CoA dehydrogenase, long chain | ACAD4, LCAD | |
| ACADM | Acyl-CoA dehydrogenase, C-4 to C-12 straight chain | RP4-682C21.1, ACAD1, MCAD, MCADH | |
| ACADVL | Acyl-CoA dehydrogenase, very long chain | ACAD6, LCACD, VLCAD | |
| ACAN | Aggrecan | AGC1, AGCAN, CSPG1, CSPGCP, MSK16, SEDK | |
| ACAP2 | ANKRD1 with coiled-coil, ankyrin repeat and PH domains 2 | CENTB2, CNT-B2 | |
| ACBD3 | Acyl-CoA binding domain containing 3 | GCP60, GOCAP1, GOLPH1, PAP7 | |
| ACBD4 | Acyl-CoA binding domain containing 4 | HMFT0700 | |
| ACBD7 | Acyl-CoA binding domain containing 7 | RP11-455B2.6, bA455B2.2 | |
| ACCN2 | Acid-sensing (proton-gated) ion channel 1 | ACCN2, ASIC, BNaC2 | |
| ACCS | L-aminocyclopropane-L-carboxylate synthase homolog (Arabidopsis) (non-functional) | ACS, PHACS | |
| ACE | Angiotensin I converting enzyme | ACE1, CD143, DCP, DCP1, ICH, MVCD3 | |
| ACE2 | Angiotensin I converting enzyme 2 | UNQ868/PRO1885, ACEH | |
| ACER3 | Alkaline ceramidase 3 | APHC, PHCA | |
| ACLY | ATP citrate lyase | ACL, ATPCL, CLATP | |
| ACMSD | Aminocarboxymuconate semialdehyde decarboxylase | | |
| ACN9 | ACN9 homolog (<i>S. cerevisiae</i>) | DC11 | |
| ACO1 | Aconitase 1, soluble | RP11-554F12.1, ACO1S, HELL00, IKED1, IKED1, IDERD1, IDERD1 | |
| ACOT11 | Acyl-CoA thioesterase 11 | BFIT, STARD14, THEA, THEM1 | |
| ACOT8 | Acyl-CoA thioesterase 8 | RP3-557OT6.2, HNAAC1E, F1E-1, F1E-2, F1E1, F1E2, LACTE III LTF | |
| ACOX1 | Acyl-CoA oxidase 1, palmitoyl | ACOX, PALMCOX, SCOX | |
| ACOX3 | Acyl-CoA oxidase 3, pristanoyl | | |
| ACP1 | Acid phosphatase 1, soluble | HAAP | |
| ACP5 | Acid phosphatase 5, tartrate resistant | SPENCDI, TRAP | |
| ACPP | Acid phosphatase, prostate | 5'-NT, ACP-3, ACP3 | |
| ACSF3 | Acyl-CoA synthetase family member 3 | PSEC0197 | |
| ACSL1 | Acyl-CoA synthetase long-chain family member 1 | ACS1, FAACL1, FAACL2, LACS, LACS1, LACS2 | |

| | | | |
|--------|--|--|---|
| ACSL3 | Acyl-CoA synthetase long-chain family | ACS3, FACL3, PRO2194 | v |
| ACSL4 | Acyl-CoA synthetase long-chain family | ACS4, FACL4, LACS4, MRX63, MRX68 | |
| ACSM2A | Acyl-CoA synthetase medium-chain family | A-923A4.1, ACSM2 | |
| ACSM2B | Acyl-CoA synthetase medium-chain family | HYST1046, ACSM2, HXMA | |
| ACSM5 | Acyl-CoA synthetase medium-chain family | | |
| ACSS1 | Acyl-CoA synthetase short-chain family | RP4-568C11.1, ACAS2L, ACECS1, AceCS2L | |
| ACSS3 | Acyl-CoA synthetase short-chain family | | |
| ACTA2 | Actin, alpha 2, smooth muscle, aorta | GIG46, AAT6, ACTSA, MYMY5 | |
| ACTC1 | Actin, alpha, cardiac muscle 1 | ACTC, ASD5, CMD1R, CMH11, LVNC4 | |
| ACTL6A | Actin-like 6A | ACTL6, ARPN-BETA, Arp4, BAF53A, INO80K | |
| ACTN2 | Actinin, alpha 2 | CMD1AA | |
| ACTR10 | Actin-related protein 10 homolog (S. pombe) | ACTR11, Arp11, HARP11 | |
| ACTR2 | Actin-related protein 2 homolog (S. pombe) | ARP2 | |
| ACTR3B | Actin-related protein 3 homolog B (S. pombe) | ARP11, ARP3BETA | |
| ACTR6 | Actin-related protein 6 homolog (S. pombe) | CDA12, ARP6, HSPC281, MSTP136, hARP6, hARPX | |
| ACTRT1 | Actin-related protein T1 | RP1-203C2.1, AIP1, ARIP1, ARPT1, HSD27 | |
| ACVR1B | Activin A receptor, type IB | ACTRIB, ACVRLK4, ALK4, SKR2 | |
| ACVR1C | Activin A receptor, type IC | ACVRLK7, ALK7 | |
| ACVR2A | Activin A receptor, type IIA | ACTRII, ACVR2 | |
| ACVR2B | Activin A receptor, type IIB | ACTRIIB, ActR-IIB, HTX4 | |
| ACVRL1 | Activin A receptor type II-like 1 | ACVRLK1, ALK-1, ALK1, HHT1, HHT2, ORW2, SKK3, TSP1 | |
| ACYP1 | Acylphosphatase 1, Erythrocyte (common) | ACYPE | |
| ADAL | Adenosine deaminase-like | | |
| ADAM10 | ADAM metallopeptidase domain 10 | AD10, AD18, CD156c, HsT18717, MADM, RAK, kuz | |
| ADAM11 | ADAM metallopeptidase domain 11 | MDC | |
| ADAM12 | ADAM metallopeptidase domain 12 | NP11-29555.5-011, CAR10, MCMI1, MCMI1M11a, MLTN, MLTNA, ADAM12 | |
| ADAM15 | ADAM metallopeptidase domain 15 | RP11-540D14.1, MDC15 | |
| ADAM18 | ADAM metallopeptidase domain 18 | UNQ858/PRO1867, ADAM27, tMDCIII | |
| ADAM19 | ADAM metallopeptidase domain 19 | FKSG34, MADDAM, MLTNB | |
| ADAM2 | ADAM metallopeptidase domain 2 | CRTN1, CRTN2, CTT3, F11NB, F11-500, F1150, F1150-1a6 | |
| ADAM23 | ADAM metallopeptidase domain 23 | MDC-3, MDC3 | |
| ADAM28 | ADAM metallopeptidase domain 28 | ADAM28, ADAM23, MDC-L, MDC-LIII, MDC-LS, MDCI, MDC II, MDCII | |
| ADAM5P | ADAM metallopeptidase domain 5, pseudogene | ADAM5P, TMDCII | |

| | | | |
|----------|--|--|--|
| ADAM7 | ADAM metalloproteinase domain 7 | ADAM 7, ADAM-7, EAPI, GP-83, GP83 | |
| ADAM9 | ADAM metalloproteinase domain 9 | CORD9, MCMP, MDC9, Mltng | |
| ADAMTS1 | ADAM metalloproteinase with thrombospondin type 1 motif 1 | C3-C5, METH1 | |
| ADAMTS13 | ADAM metalloproteinase with thrombospondin type 1 motif 13 | UNQ01027/KOZ0085, ADAM-TS13, ADAMTS-13, CO-88, WVECB, WVE CB | |
| ADAMTS14 | ADAM metalloproteinase with thrombospondin type 1 motif 14 | RP11-399N22.5 | |
| ADAMTS17 | ADAM metalloproteinase with thrombospondin type 1 motif 17 | | |
| ADAMTS18 | ADAM metalloproteinase with thrombospondin type 1 motif 18 | ADAMTS21, KNO2, MMCAT | |
| ADAMTS19 | ADAM metalloproteinase with thrombospondin type 1 motif 19 | | |
| ADAMTS3 | ADAM metalloproteinase with thrombospondin type 1 motif 3 | ADAMTS-4 | |
| ADAMTS5 | ADAM metalloproteinase with thrombospondin type 1 motif 5 | ADAM-TS 11, ADAM-TS 5, ADAM-TS5, ADAMTS-11, ADAMTS 5, ADAMTS11, ADMP 2 | |
| ADAMTS6 | ADAM metalloproteinase with thrombospondin type 1 motif 6 | ADAM-TS 6, ADAM-TS6, ADAMTS-6 | |
| ADAMTS8 | ADAM metalloproteinase with thrombospondin type 1 motif 8 | ADAM-TS8, METH2 | |
| ADAMTS9 | ADAM metalloproteinase with thrombospondin type 1 motif 9 | | |
| ADAMTSL1 | ADAMTS-like 1 | RP11-220B22.2, ADAMTSL-1, ADAMTSK1, C90H94, PUNGTIN | |
| ADAP2 | ArfGAP with dual PH domains 2 | CENTA2, HSA272195, cent-b | |
| ADAR | Adenosine deaminase, RNA-specific | RP11-01E14.31, ACSU, DRADA, DSH, DSKAD, GTP1, HEL 4, HEL 4, K89DSDRD, D136, ADAR | |
| ADARB1 | Adenosine deaminase, RNA-specific, B1 | ADAR2, DRABA2, DRADA2, RED1 | |
| ADAT2 | Adenosine deaminase, tRNA-specific 2 | hCG_18099, DEADC1, TAD2, dJ20N2, dJ20N2.1 | |
| ADC | | | |
| ADCY1 | Adenylate cyclase 1 (brain) | AC1, DFNB44 | |
| ADCY2 | Adenylate cyclase 2 (brain) | | |
| ADCY6 | Adenylate cyclase 6 | AC6 | |
| ADCY7 | Adenylate cyclase 7 | AC7 | |
| ADCY9 | Adenylate cyclase 9 | AC9 | |
| ADCYAP1 | Adenylate cyclase activating polypeptide 1 (pituitary) | | |
| ADD1 | Adducin 1 (alpha) | RP11-520M5.1, ADDA | |
| ADD2 | Adducin 2 (beta) | ADDB | |
| ADD3 | Adducin 3 (gamma) | RP11-252O7.3, ADDL | |
| ADH1A | Alcohol dehydrogenase 1A (class I), alpha | ADH1 | |
| ADH1B | Alcohol dehydrogenase 1B (class I), beta | ADH2, HEL-S-117 | |
| ADH4 | Alcohol dehydrogenase 4 (class II), pi | ADH-2, HEL-S-4 | |
| ADH5 | Alcohol dehydrogenase 5 (class III), chi | ADH-3, ADHX, FALDH, FDH, GSH-FDH, GSNOR | |
| ADHFE1 | Alcohol dehydrogenase, iron containing, 1 | HMFT2263, ADH8, HOT | |

| | | | |
|---------|--|---|--|
| ADIPOQ | Adiponectin, C1Q and collagen domain containing | ACDC, ACP130, ADIPQ1E1, ADPN, AFM-1, AFM1, CDD30 | |
| ADIPOR2 | Adiponectin receptor 2 | ACDCR2, PAQR2 | |
| ADK | Adenosine kinase | AK | |
| ADM | Adrenomedullin | AM, PAMP | |
| ADNP | Activity-dependent neuroprotector | ADNP1, MRD28 | |
| ADO | 2-aminobenzamide (cysteamine) dihydrogenase | C10orf22 | |
| ADORA2A | Adenosine A2a receptor | A2aR, ADORA2, RDC8 | |
| ADPGK | ADP-dependent glucokinase | PSEC0260, 2610017G09Rik, ADP-GK | |
| ADPRH | ADP-ribosylarginine hydrolase | ARH1 | |
| ADRA2A | Adrenoceptor alpha 2A | ADRA2, ADRA2R, ADRAR, ALPHA2AAR, ZNF32 | |
| ADRA2B | Adrenoceptor alpha 2B | ADRA2L1, ADRA2L2, ADRA2L3, ALTIHAZBAK, Adra2BAP | |
| ADRBK1 | Adrenergic, beta, receptor kinase 1 | BARK1, BETA-ARK1, GRK2 | |
| ADRBK2 | Adrenergic, beta, receptor kinase 2 | BARK2, GRK3 | |
| AES | Amino-terminal enhancer of split | AES-1-2, ESP1, GRG, GRG5, TLE5, AES | |
| AFAP1 | Actin filament associated protein 1 | AFAP, AFAP-11010, AFAP1 | |
| AFARP1 | Aldo-keto reductase family 7, member A2 pseudogene 1 | | |
| AFF1 | AF4/FMR2 family, member 1 | AF4, MLLT2, PBM1 | |
| AFF2 | AF4/FMR2 family, member 2 | FMR2, FMR2P, FRAXE, MRX2, OX19 | |
| AFF3 | AF4/FMR2 family, member 3 | LAF4, MLLT2-like | |
| AFF4 | AF4/FMR2 family, member 4 | HSPC092, AF5Q31, MCEF | |
| AFG3L1 | AFG3-like AAA ATPase 1, pseudogene | AFG3, AFG3L1 | |
| AFTPH | Aftiphilin | Nbla10388 | |
| AGAP11 | Ankyrin repeat and GTPase domain Ankyrin repeat and GTPase domain 11 | | |
| AGAP9 | Ankyrin repeat and GTPase domain 9 | AGAP-9, CTGLF6, bA301J7.2 | |
| AGBL3 | ATP/GTP binding protein-like 3 | CCP3 | |
| AGBL4 | ATP/GTP binding protein-like 4 | RP11-342A17.1, CCP6 | |
| AGBL5 | ATP/GTP binding protein-like 5 | CCP5 | |
| AGFG1 | ArfGAP with FG repeats 1 | HRB, RAB, RIP | |
| AGFG2 | ArfGAP with FG repeats 2 | tcag7.884, HRBL, RABR | |
| AGGF1 | Angiogenic factor with G patch and FHA domains 1 | GPATC7, GPATCH7, HSU84971, HUS84971, VG5Q | |
| AGK | Acylglycerol kinase | CATC5, CTRCT38, MTDPS10, MULK | |
| AGL | Amylo-alpha-1, 6-glucosidase, 4-alpha-1-galactosidase | GDE | |
| AGPAT1 | 1-Acylglycerol-3-phosphate O-acyltransferase 1 | DAAT-216M16.8, 1-AGPAT1, G13, L1AA1-alpha, L1AA1A | |

| | | |
|---------|--|---|
| AGPAT3 | 1-Acylglycerol-3-phosphate O- | UNQ759/PRO1490, LPAAT-GAMMA1, LPAAT3 |
| AGPAT4 | 1-Acylglycerol-3-phosphate O- | RP3-473J16.2, 1-AGPAT4, LPAAT-delta, dJ473J16.2 |
| AGPAT5 | 1-Acylglycerol-3-phosphate O- | 1AGPAT5, LPAATE |
| AGPAT6 | 1-Acylglycerol-5-phosphate O- | UNQ551/TKO1108, 1-AGPAT6, LPAAT-zeta, |
| AGPAT9 | 1-Acylglycerol-5-phosphate O- | LRM1475-7, AGPAT10, AGPAT8, GPAT3, LPAAT- |
| AGPS | Alkylglycerone phosphate synthase | AAG5, ADAP-S, ADAS, ADHAPS, ADPS, ALDHPSY |
| AGT | Angiotensinogen (serpin peptidase inhibitor, | ANHU, SERPINA8 |
| AGTPBP1 | ATP/GTP binding protein 1 | RP11-30C23.1, CCP1, NNA1 |
| AGTR1 | Angiotensin II receptor, type 1 | AG25B, A11, A11AK, A11B, A11BK, A11K, A12N1, |
| AGTRAP | Angiotensin II receptor-associated protein | RP11-56N19.3, ATRAP |
| AGXT | Alanine-glyoxylate aminotransferase | AGT, AGT11, PH1, SPAT, SPT, TLH6, AGXT |
| AHCTF1 | AT hook containing transcription factor 1 | MSTP108, ELYS, MST108, TMBS62 |
| AHCYL1 | Adenosylhomocysteinase-like 1 | DCAL, IRBIT, PPP1R78, PRO0233, XPVKONA |
| AHNAK | AHNAK nucleoprotein | AHNAKRS |
| AHR | Aryl hydrocarbon receptor | bHLHe76 |
| AHRR | Aryl-hydrocarbon receptor repressor | hCG_2044128, AHH, AHHR, bHLHe77 |
| AICDA | Activation-induced cytidine deaminase | AID, ARP2, CDA2, HEL-S-284, HIGM2 |
| AIDA | Axin interactor, dorsalization associated | RP11-378J18.7, C1orf80 |
| AIFM2 | Apoptosis-inducing factor, mitochondrial- | RP11-367H5.2, AMID, PRG3 |
| AIM1 | Absent in melanoma 1 | RP11-294H11.2, CRYBG1, ST4 |
| AIM1L | Absent in melanoma 1-like | RP11-569G9.5, CRYBG2 |
| AIPL1 | Aryl hydrocarbon receptor interacting | AIPL2, LCA4 |
| AK3 | Adenylate kinase 3 | RP11-6J24.4L1, AK6, AKL3L, AKL3L1, FIX, AK3 |
| AK3L1 | Adenylate kinase 4 | RP4-686B20.1, AK 4, AK3, AK3L1, AK3L2 |
| AKAP11 | A kinase (PRKA) anchor protein 11 | AKAP-11, AKAP220, PPP1R44, PRKA11 |
| AKAP12 | A kinase (PRKA) anchor protein 12 | AKAP250, SSeCKS |
| AKAP13 | A kinase (PRKA) anchor protein 13 | AKAP-13, AKAP-LDC, ANIOLET3, DNA, HA-3, H31, |
| AKAP2 | A kinase (PRKA) anchor protein 2 | RP11-470J20.3, AKAP-2, AKAPKL, PRKA2 |
| AKAP4 | A kinase (PRKA) anchor protein 4 | RP11-577G1__D.1, AKAP 82, AKAP-4, AKAP 82, |
| AKAP5 | A kinase (PRKA) anchor protein 5 | AKAP75, AKAP79, H21 |
| AKAP6 | A kinase (PRKA) anchor protein 6 | ADAP100, ADAP6, AKAP100, PRKA6, mAKAP |
| AKAP7 | A kinase (PRKA) anchor protein 7 | AKAP15, AKAP18 |
| AKAP9 | A kinase (PRKA) anchor protein 9 | AKAP-9, AKAP350, AKAP450, CG-NAP, H11FENION, |

| | | | |
|---------|--|--|---|
| AKD1 | Adenylate kinase domain containing 1 | AKD2, C6orf199, C6orf224, dJ70A9.1 | |
| AKIRIN1 | Akirin 1 | RP11-781D11.2, C1orf108, STRF2 | |
| AKIRIN2 | Akirin 2 | C6orf166, FBI1, dJ486L4.2 | |
| AKNA | AT-hook transcription factor | RP11-82I1.4 | |
| AKR1B15 | Aldo-keto reductase family 1, member B15 | tcag7.1260, AKR1B10L, AK1R1B7 | |
| AKR1C2 | Aldo-keto reductase family 1, member C2 | AKR1C-pseudo, BADI, DD, DD2, DDH2, HAKKD, HBAR, MCDP2, SRVX, TDD | |
| AKR1D1 | Aldo-keto reductase family 1, member D1 | 3o5bred, CBAS2, SRD5B1 | |
| AKR1E2 | Aldo-keto reductase family 1, member E2 | AKR1CL2, AKRDC1, LoopADR, hTSP, htAKR | |
| AKR7L | Aldo-keto reductase family 7-like | AFAR3, AFB1-AR3, AKR7A4 | |
| AKT2 | v-akt murine thymoma viral oncogene homolog 2 | HHGHH, PKBB, PKBBETA, PRKBB, RAC-BETA | v |
| AKT3 | v-akt murine thymoma viral oncogene homolog 3 | MI11, MI11L2, FRD-GAMMA, FRBG, FRKDU, RAC-BK, gamma, RAC-gamma, STK 2 | |
| ALB | Albumin | GIG20, PRO0883, PRO0903, PRO1341 | |
| ALCAM | Activated leukocyte cell adhesion molecule | CD166, MEMD | |
| ALDH1A1 | Aldheyde dehydrogenase 1 family, member 1 | RP11-151D14.2, ALDC, ALDH1E1, ALDH1, ALDH1L1, HFL 9, HFL 5-52, HFL12, RUMBL, RALDH | |
| ALDH1A2 | Aldheyde dehydrogenase 1 family, member 2 | RALDH(II), RALDH2, RALDH2-T | |
| ALDH1A3 | Aldheyde dehydrogenase 1 family, member 3 | RP11-66B24.1, ALDH1A6, ALDH6, MCOP8, RALDH3 | |
| ALDH1L1 | Aldheyde dehydrogenase 1 family, member 1L1 | 10-FTHFDH, 10-fTHF, FDH, FTHFD | |
| ALDH1L2 | Aldheyde dehydrogenase 1 family, member 1L2 | mtFDH | |
| ALDH3A2 | Aldheyde dehydrogenase 3 family, member 2 | ALDH10, FALDH, SLS | |
| ALDH5A1 | Aldheyde dehydrogenase 5 family, member 1 | SSADH, SSDH | |
| ALDH9A1 | Aldheyde dehydrogenase 9 family, member 1 | ALDH4, ALDH7, ALDH9, E3, TMABADH | |
| ALG1 | ALG1, chitobiosyltransferase subunit | FSEC0001, CDG1K, HMA11, HMT1-1, HMT1, MT1-1, Mt1, Mt1 | |
| ALG10 | ALG10, alpha-1,2-glucosyltransferase | ALG10A, DIE2, KCR1 | |
| ALG10B | ALG10B, alpha-1,2-glucosyltransferase | ALG10, KCR1 | |
| ALG11 | ALG11, alpha-1,2-mannosyltransferase | RP11-248G5.6, CDG1P, GT8 | |
| ALG13 | ALG13, UDP-N-acetylglucosaminyltransferase subunit | RP11-278J18.2, CDG1S, CA0143, GLT26D1, MDS031, TDRD12, XGL047W | |
| ALG2 | ALG2, alpha-1,3/1,6-mannosyltransferase | RP11-13B9.1, CDG1i, NET38, hALPG2 | |
| ALG6 | ALG6, alpha-1,3-glucosyltransferase | My046, CDG1C | |
| ALG9 | ALG9, alpha-1,2-mannosyltransferase | CDG1L, DIBD1, LOH11CR1J | |
| ALKBH4 | AlkB, alkylation repair homolog 4 (<i>E. coli</i>) | ABH4 | |
| ALKBH5 | AlkB family member 5, RNA demethylase | ABH5, OFOXD, OFOXD1 | |
| ALKBH8 | AlkB, alkylation repair homolog 8 (<i>E. coli</i>) | ABH8 | |
| ALMS1P | Alstrom syndrome 1 pseudogene | | |

| | | | |
|----------|---|---|--|
| ALOX5 | Arachidonate 5-lipoxygenase | RP11-67C2.3, 5-LO, 5-LOX, 5LPG, LOG5 | |
| ALPK1 | Alpha-kinase 1 | 8430410J10Rik, LAK | |
| ALPK3 | Alpha-kinase 3 | MAK, MIDORI | |
| ALS2 | Amyotrophic lateral sclerosis 2 (juvenile) | ALS2CR6, ALSJ, IAHSJ, PLSJ | |
| ALS2CR12 | Amyotrophic lateral sclerosis 2 (juvenile) | | |
| ALS2CR4 | | | |
| ALS2CR8 | | | |
| AMAC1 | | | |
| AMBRA1 | Autophagy/beclin-1 regulator 1 | DCAF3, WDR94 | |
| AMD1 | Adenosylmethionine decarboxylase 1 | RP11-397G5.3, ADOMETDC, AMD, SAMDC | |
| AMFR | Autocrine motility factor receptor, E3 | GP78, RNF45 | |
| AMMECR1 | Aipert's syndrome, mental retardation, midface hypoplasia and elliptocytosis | RP13-360B22.1, AMMERC1 | |
| AMMECR1L | AMMECR1-like | | |
| AMOT | Angiomotin | | |
| AMOTL1 | Angiomotin like 1 | JEAP | |
| AMOTL2 | Angiomotin like 2 | LCCP | |
| AMPD3 | Adenosine monophosphate deaminase 3 | | |
| AMT | Aminomethyltransferase | GCE, GCST, GCVT, NKH | |
| AMZ1 | Archaelysin family metallopeptidase 1 | | |
| ANAPC16 | Anaphase promoting complex subunit 16 | APC16, C10orf104, CENP-27, MSAG, bA570G20.3 | |
| ANGEL2 | Angel homolog 2 (Drosophila) | Ccr4d, KIAA0759L | |
| ANGPT1 | Angiopoietin 1 | AGP1, AGPT, ANG1 | |
| ANGPT2 | Angiopoietin 2 | AGPT2, ANG2 | |
| ANGPTL1 | Angiopoietin-like 1 | FSEC0134, ANG3, ANGPT3, ANK1, Ang1, UNQ102, H505C2.2 | |
| ANGPTL2 | Angiopoietin-like 2 | RP11-1M19.1, ARP2, HARP | |
| ANK1 | Ankyrin 1, erythrocytic | ANK, SPH1, SPH2 | |
| ANK2 | Ankyrin 2, neuronal | | |
| ANKAR | Ankyrin and armadillo repeat containing | | |
| ANKFY1 | Ankyrin repeat and FYVE domain | ANKHZN, BTBD23, ZFYVE14 | |
| ANKH | Ankyrin inorganic pyrophosphate transport | UNQ241/TKO274, ANK, CCAL2, CMD3, CTFDD, HANK, MANK | |
| ANKIB1 | Ankyrin repeat and IBR domain containing 1 | | |
| ANKLE1 | Ankyrin repeat and LEM domain containing | ANKRD41, LEM3, LEMD6 | |
| ANKLE2 | Ankyrin repeat and LEM domain containing | KIAA0692, LEMD7, Lem4 | |

| | | | |
|-----------|--|---|--|
| ANKMY1 | Ankyrin repeat and MITND domain | ZMYND13 | |
| ANKMY2 | Ankyrin repeat and MITND domain containing 2 | ZMYND20 | |
| ANKRD1 | Ankyrin repeat domain 1 (cardiac muscle) | ALRP, C-193, CARP, CVARP, MVARP, bA320F15.2 | |
| ANKRD10 | Ankyrin repeat domain 10 | RP11-120J20.3 | |
| ANKRD12 | Ankyrin repeat domain 12 | ANCO-2, ANCO1, GAC-1, Nbla00144 | |
| ANKRD13A | Ankyrin repeat domain 13A | ANKRD13, NY-REN-25 | |
| ANKRD13C | Ankyrin repeat domain 13C | RP4-677H15.5, dJ677H15.3 | |
| ANKRD17 | Ankyrin repeat domain 17 | GTAR, NY-BR-16 | |
| ANKRD18A | Ankyrin repeat domain 18A | | |
| ANKRD20A2 | Ankyrin repeat domain 20 family, member A2 | | |
| ANKRD20A3 | Ankyrin repeat domain 20 family, member A3 | | |
| ANKRD20A5 | Ankyrin repeat domain 20 family, member A5, pseudogene | | |
| ANKRD20B | Ankyrin repeat domain 20B | | |
| ANKRD22 | Ankyrin repeat domain 22 | | |
| ANKRD26 | Ankyrin repeat domain 26 | THC2, bA145E8.1 | |
| ANKRD27 | Ankyrin repeat domain 27 (VPS9 domain) | PP12899, VARP | |
| ANKRD28 | Ankyrin repeat domain 28 | PITK, PPP1R65 | |
| ANKRD30B | Ankyrin repeat domain 30B | NY-BR-1.1 | |
| ANKRD32 | Ankyrin repeat domain 32 | BRCTD1, BRCTx | |
| ANKRD33 | Ankyrin repeat domain 33 | C12orf7, PANKY | |
| ANKRD34C | Ankyrin repeat domain 34C | | |
| ANKRD36 | Ankyrin repeat domain 36 | UNQ2430/PRO499, UNQ2430 | |
| ANKRD40 | Ankyrin repeat domain 40 | | |
| ANKRD42 | Ankyrin repeat domain 42 | PPP1R79, SARP | |
| ANKRD43 | | | |
| ANKRD44 | Ankyrin repeat domain 44 | PP6-ARS-B | |
| ANKRD5 | | | |
| ANKRD50 | Ankyrin repeat domain 50 | | |
| ANKRD52 | Ankyrin repeat domain 52 | UNQ5837, ANKRD33 | |
| ANKRD53 | Ankyrin repeat domain 53 | | |
| ANKRD62 | Ankyrin repeat domain 62 | DKFZp779B1634 | |
| ANKRD7 | Ankyrin repeat domain 7 | TSA806 | |
| ANKS1B | Ankyrin repeat and sterile alpha motif domain containing 1B | AIDA, AIDA-1, ANKS2, EB-1, EB1, cajalin-2 | |

| | | | |
|---------|---|--|---|
| ANKZF1 | Ankyrin repeat and zinc finger domain | ZNF744 | |
| ANO1 | Anoctamin 1, calcium activated chloride channel | DOG1, ORAOV2, TAOS2, TMEM16A | |
| ANO4 | Anoctamin 4 | TMEM16D | |
| ANO5 | Anoctamin 5 | GDD1, LGMD2L, TMEM16E | |
| ANO6 | Anoctamin 6 | BDPLT7, SCTS, TMEM16F | |
| ANO7 | Anoctamin 7 | D-TMPT, DTMPT, IFCA-3, IFCA5, INGL1, FCANAF3, FCANAF5, FCANAF6, TMEM16G, LAMP1, MATM, PTHAT1, PTHAT2, PTHAT3 | |
| ANP32A | Acidic (leucine-rich) nuclear phosphoprotein 32 family member A | CTJN11, H1T, TM16A, LAMP1, MATM, PTHAT1, PTHAT2, PTHAT3 | |
| ANTXR1 | Anthrax toxin receptor 1 | ATR, GAPO, TEM8 | |
| ANTXR2 | Anthrax toxin receptor 2 | CMG-2, CMG2, HFS, ISH, JHF | |
| ANUBL1 | | | |
| ANXA10 | Annexin A10 | ANX14 | |
| ANXA11 | Annexin A11 | RP11-369J21.10-010, ANX11, CAP50 | |
| ANXA4 | Annexin A4 | ANX4, HEL-S-274, PIG28, ZAP36 | |
| ANXA6 | Annexin A6 | ANX6, CBP68 | |
| ANXA7 | Annexin A7 | RP11-537A6.8, ANX7, SNX, SYNEXIN | |
| AP1AR | Adaptor-related protein complex 1 | PRO0971, 2C18, C4orf16, GBAR, gamma-BAR | |
| AP1B1 | Adaptor-related protein complex 1, beta 1 | ADTB1, AP105A, BAM22, CLAPB2 | |
| AP1G1 | Adaptor-related protein complex 1, gamma 1 | ADTG, CLAPG1 | |
| AP1S2 | Adaptor-related protein complex 1, sigma 2 | DCZZ, MGC1902, MIKAS9, MIKAS21, MIKAS3, MYX5, PDC, SIGMA1B | |
| AP1S3 | Adaptor-related protein complex 1, sigma 3 | | |
| AP3D1 | Adaptor-related protein complex 3, delta 1 | PRO0039, ADTD, hBLVR | |
| AP3M1 | Adaptor-related protein complex 3, mu 1 | RP11-178G16.4 | |
| AP3M2 | Adaptor-related protein complex 3, mu 2 | AP47B, CLA20, P47B | |
| AP3S2 | Adaptor-related protein complex 3, sigma 2 | AP3S3, sigma3b | |
| AP4B1 | Adaptor-related protein complex 4, beta 1 | RP5-1073O3.4, BETA-4, CPSQ5, SPG47 | |
| AP4E1 | Adaptor-related protein complex 4, epsilon 1 | CPSQ4, SPG51 | |
| AP4S1 | Adaptor-related protein complex 4, sigma 1 | AP47B, CLA20, CLAPS4, CPSQ6, SPG52 | |
| APBA1 | Amyloid beta (A4) precursor protein-binding family B member 1 | D9S411E, LIN10, MINT1, X11, X11A, X11ALPHA | |
| APBB1IP | Amyloid beta (A4) precursor protein-binding family B member 1 interacting protein | RP11-128B16.1, INAG1, PREL1, RARP1, RIAM | |
| APBB2 | Amyloid beta (A4) precursor protein-binding family B member 2 | FE65L, FE65L1 | |
| APC | Adenomatous polyposis coli | BTSP2, DP2, DP2.5, DP3, GS, PPP1R46 | v |
| APCDD1L | Adenomatous polyposis coli down-regulated 1 like | RP4-685L9.2 | |
| APEH | Acylaminoacyl-peptide hydrolase | AAKE, ACT11, APT1, D3F153Z, D3546E, DNF153Z, ODU | |

| | | | |
|----------|---|---|--|
| APH1B | APH1B gamma secretase subunit | UNQ088/PRO1328, APH1B, PRO1328, FSTL, TAAAC88 | |
| API5 | Apoptosis inhibitor 5 | MIG8, AAC-11, AAC11 | |
| APITD1 | Apoptosis-inducing, TAF9-like domain 1 | CENP-S, CENPS, FAAP16, MHF1 | |
| APLF | Aprataxin and PNKP like factor | APFL, C2orf13, PALF, Xip1, ZCCHH1 | |
| APLN | Apelin | UNQ471, APEL, XNPEP2 | |
| APLP2 | Amyloid beta (A4) precursor-like protein 2 | APLP-2, APPH, APPL2, CDEBP | |
| APOBEC1 | Apolipoprotein B mRNA editing enzyme, catalytic subunit-like 1 | APOBEC-1, BEDP, CDAR1, HEPR | |
| APOBEC2 | Apolipoprotein B mRNA editing enzyme, catalytic subunit-like 2 | ARCD1, ARP1 | |
| APOF | Apolipoprotein F | Apo-F, LTIP | |
| APOL6 | Apolipoprotein L, 6 | UNQ3095/PRO21341, APOL-VI, APOLVI | |
| APOLD1 | Apolipoprotein L domain containing 1 | VERGE | |
| APOO | Apolipoprotein O | My025, FAM121B | |
| APPBP2 | Amyloid beta precursor protein (cytoplasmic) adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper | APP-BP2, HS.84084, PAT1 | |
| APPL2 | Adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper | DIP13B | |
| AQP1 | Aquaporin 1 (Colton blood group) | AQP-CHIP, CHIP28, CO | |
| AQP10 | Aquaporin 10 | AQPA_HUMAN | |
| AQP2 | Aquaporin 2 (collecting duct) | AQP-CD, WCH-CD | |
| AQP3 | Aquaporin 3 (Gill blood group) | AQP-3, GIL | |
| AQP4 | Aquaporin 4 | HMIWC2, MIWC | |
| AQP8 | Aquaporin 8 | AQP-8 | |
| AQP9 | Aquaporin 9 | AQP-9, HsT17287, SSC1 | |
| ARAP2 | ARHGAP with RHO GAP domain, ankyrin repeat and PH domain 2 | CENTD1, PARX | |
| ARAP3 | ARHGAP with RHO GAP domain, ankyrin repeat and PH domain 3 | CENTD3, DRAG1 | |
| ARF3 | ADP-ribosylation factor 3 | | |
| ARF6 | ADP-ribosylation factor6 | | |
| ARFGAP3 | ADP-ribosylation factor GTPase activating protein 3 | AL049757.1, ARFGAP1 | |
| ARFGEF1 | ADP-ribosylation factor guanine nucleotide exchange factor 1 | ARFGEF1, BIG1, P200 | |
| ARFGEF2 | ADP-ribosylation factor guanine nucleotide exchange factor 2 (beta-falixin A inhibitor) | BIG2, PVNH2, dJ1164I10.1 | |
| ARFIP1 | ADP-ribosylation factor interacting protein 1 | ADP-ribosylation factor interacting protein 1 | |
| ARFRP1 | ADP-ribosylation factor related protein 1 | RP4-583P15.1, ARL18, ARP, Arp1 | |
| ARG2 | Arginase 2 | | |
| ARGFX | Arginine-fifty homeobox | | |
| ARHGAP10 | Rho GTPase activating protein 10 | GRAF2, PS-GAP, PSGAP | |

| | | | |
|-----------|---|--|---|
| ARHGAP11A | Rho GTPase activating protein 11A | RP11-1000B6.5, GAP (1-12) | |
| ARHGAP11B | Rho GTPase activating protein 11B | B'-T, FAM7B1 | |
| ARHGAP12 | Rho GTPase activating protein 12 | | |
| ARHGAP17 | Rho GTPase activating protein 17 | hCG_1984370, MST1000, MST110, MST1058, MSTR066, MSTR110, NADBNL, PR267, PR4524, RICH | |
| ARHGAP18 | Rho GTPase activating protein 18 | MacGAP, SENEX, bA307O14.2 | |
| ARHGAP19 | Rho GTPase activating protein 19 | | |
| ARHGAP20 | Rho GTPase activating protein 20 | RARHOGAP | |
| ARHGAP25 | Rho GTPase activating protein 25 | HEL-S-308, KAIA0053 | |
| ARHGAP26 | Rho GTPase activating protein 26 | GRAF, GRAF1, OPHN1L, OPHN1L1 | |
| ARHGAP29 | Rho GTPase activating protein 29 | RP11-255E17.1, PARG1 | |
| ARHGAP32 | Rho GTPase activating protein 32 | CC-GAP, GR11, FX-RICS, RICS, p200RhoGAP, p250GAP | |
| ARHGAP5 | Rho GTPase activating protein 5 | GFI2, RhoGAP5, p190-B, p190BRhoGAP | |
| ARHGAP6 | Rho GTPase activating protein 6 | RHOGAP6, RHOGAPX-1 | |
| ARHGEF12 | Rho guanine nucleotide exchange factor (GEF) 12 | LARG, PRO2792 | v |
| ARHGEF15 | Rho guanine nucleotide exchange factor (GEF) 15 | ARGEF15, E5, Ephexin5, Vsm-RhoGEF | |
| ARHGEF17 | Rho guanine nucleotide exchange factor (GEF) 17 | P164RHOGEF, TEM4, p164-RhoGEF | |
| ARHGEF2 | Rho guanine nucleotide exchange factor (GEF) 2 | RP11-336K24.3, GEF, GEF-H1, GEFH1, LFP40, P40 | |
| ARHGEF3 | Rho guanine nucleotide exchange factor (GEF) 3 | GEF3, STA3, XPLN | |
| ARHGEF33 | Rho guanine nucleotide exchange factor (GEF) 33 | | |
| ARHGEF37 | Rho guanine nucleotide exchange factor (GEF) 37 | | |
| ARHGEF7 | Rho guanine nucleotide exchange factor (GEF) 7 | RP11-494F3.1, BETA-TX, COOL-1, COOL1, RP11-1937C3.4, P50, P50BP, P85, P85GGL1, P85SDD | |
| ARHGEF9 | Rho guanine nucleotide exchange factor (GEF) 9 | RP11-337C3.4, COOL1, DISTIN, LILL8, HPLM-2, PLM-2, PFM2, RP11-419LE10.1, OAS-3, BAF200B, BRIGHT, DANIS, FLD/OSA1, MBD12, OSA2, P250B | |
| ARID1B | AT rich interactive domain 1B (SWI1-like) | RP11-494F3.1, BETA-TX, COOL-1, COOL1, RP11-1937C3.4, P50, P50BP, P85, P85GGL1, P85SDD | |
| ARID2 | AT rich interactive domain 2 (ARID, KIA-) | BAF200, p200 | v |
| ARID3A | AT rich interactive domain 3A (BRIGHT-) | BRIGHT, DRIL1, DRIL3, E2FBP1 | |
| ARID3B | AT rich interactive domain 3B (BRIGHT-) | BDP, DRIL2 | |
| ARID4B | AT rich interactive domain 4B (RBP1-like) | RP11-382D8.2, DCAA, DKCAAT, KDDITL1, KBITL1, CAP180 | |
| ARID5B | AT rich interactive domain 5B (MRF1-like) | RP11-341A19.1, DESRT, MRF-2, MRF2 | |
| ARIH1 | Ariadne RBR E3 ubiquitin protein ligase 1 | HUSSY-27, ARI, HARI, HHARI, UBCH7BP | |
| ARIH2 | Ariadne RBR E3 ubiquitin protein ligase 2 | HT005, ARI2, TRIAD1 | |
| ARL1 | ADP-ribosylation factor-like 1 | ARFL1 | |
| ARL10 | ADP-ribosylation factor-like 10 | Arl10a, Arm1 | |
| ARL11 | ADP-ribosylation factor-like 11 | RP11-432M24.1, ARLTS1 | |

| | | | |
|---------|--|--|---|
| ARL17A | ADP-ribosylation factor-like 17A | RP11-927P21.1, ARF1P2, ARL17P1 | |
| ARL2BP | ADP-ribosylation factor-like 2 binding protein | BART, BART1, RP66 | |
| ARL3 | ADP-ribosylation factor-like 3 | RP11-47A8.3, ARFL3 | |
| ARL4A | ADP-ribosylation factor-like 4A | ARL4 | |
| ARL4C | ADP-ribosylation factor-like 4C | ARL7, LAK | |
| ARL4D | ADP-ribosylation factor-like 4D | ARF4L, ARL6 | |
| ARL5A | ADP-ribosylation factor-like 5A | ARFLP5, ARL5 | |
| ARL5B | ADP-ribosylation factor-like 5B | ARL8 | |
| ARL6 | ADP-ribosylation factor-like 6 | BBS3, RP55 | |
| ARL6IP1 | ADP-ribosylation factor-like 6 interacting protein 1 | AIP1, ARL6IP, ARMER, SPG61 | |
| ARL6IP5 | ADP-ribosylation factor-like 6 interacting protein 5 | HSPC127, DLK11, GTRAP3-18, JWA, TRAF3, TRAF3IP1 | |
| ARL6IP6 | ADP-ribosylation factor-like 6 interacting protein 6 | AIP-6, PFAAP1 | |
| ARL8B | ADP-ribosylation factor-like 8B | ARL10C, Gie1 | |
| ARMC1 | Armadillo repeat containing 1 | Arcp | |
| ARMC10 | Armadillo repeat containing 10 | PSEC0198, PNAS-112, PNAS112, SVH | |
| ARMC4 | Armadillo repeat containing 4 | RP11-691I13.1, CILD23 | |
| ARMC8 | Armadillo repeat containing 8 | S863-2, GID5, HSPC056, VID28 | |
| ARMC9 | Armadillo repeat containing 9 | ARM, KU-MEL-1, NS21 | |
| ARMCX2 | Armadillo repeat containing, X-linked 2 | GHc-602D8.1, ALEX2, GASP9 | |
| ARMCX3 | Armadillo repeat containing, X-linked 3 | RP4-545K15.2, ALEX3, GASP6, dJ545K15.2 | |
| ARMCX4 | Armadillo repeat containing, X-linked 4 | LL0XNC01-209G1.1, CXorf35, GASP4 | |
| ARNT | Aryl hydrocarbon receptor nuclear translocator 1 | HR23F-beta, HR23F-beta, HR23F-beta, HR23F, HR23F-beta, TANGO, bHLHe3 | v |
| ARNT2 | Aryl hydrocarbon receptor nuclear translocator 2 | WEDAS, bHLHe1 | |
| ARNTL | Aryl hydrocarbon receptor nuclear translocator 3 | BMAL1, BMAL1c, JAP3, MOP3, PASD3, TIC, bHLHe5 | |
| ARPC1A | Actin related protein 2/3 complex, subunit 1A | Arc40, HEL-68, SOP2Hs, SOP2L | |
| ARPC1B | Actin related protein 2/3 complex, subunit 1B | ARC41, p40-ARC, p41-ARC | |
| ARPP21 | CAMP-regulated phosphoprotein, 21 kDa | ARPP-21, R3HDM3, RCS, TARPP | |
| ARRB1 | Arrestin, beta 1 | ARB1, ARR1 | |
| ARRB2 | Arrestin, beta 2 | ARB2, ARR2, BARR2 | |
| ARRDC3 | Arrestin domain containing 3 | TLIMP | |
| ARRDC4 | Arrestin domain containing 4 | | |
| ARRDC5 | Arrestin domain containing 5 | 1700013E09Rik | |
| ARSB | Arylsulfatase B | ASB, G4S, MPS6 | |

| | | | |
|---------|---|---|---|
| ARSD | Arylsulfatase D | ASD | |
| ARSJ | Arylsulfatase family, member J | UNQ372/PRO708 | |
| ARSK | Arylsulfatase family, member K | UNQ630/PRO1246, TSULF | |
| ART5 | ADP-ribosyltransferase 5 | UNQ575/PRO1137, ARTC5 | |
| ARV1 | ARV1 homolog (<i>S. cerevisiae</i>) | RP11-423F24.1 | |
| ASAH2 | <i>iv</i> -acylsphingosine amidohydrolase (non-ARV1-like) with SH3 domain, ankyrin repeat and PH domain 2 | BCDase, HNAC1, LCDase, N-CDase, NCDase | |
| ASAP2 | ARV1-like with SH3 domain, ankyrin repeat and PH domain 2 | AMAT2, CENTB5, DDEF2, TAG5, TAF, Tap-alpha, SHAC1 | |
| ASAP3 | ARV1-like with SH3 domain, ankyrin repeat and PH domain 2 | ACAP4, CENTB6, DDEFL1, UPLC1 | |
| ASB1 | Ankyrin repeat and SOCS box containing 1 | ASB-1 | |
| ASB15 | Ankyrin repeat and SOCS box containing 15 | | |
| ASB2 | Ankyrin repeat and SOCS box containing 2 | ASB-2 | |
| ASB3 | Ankyrin repeat and SOCS box containing 3 | ASB-3 | |
| ASB5 | Ankyrin repeat and SOCS box containing 5 | ASB-5 | |
| ASB7 | Ankyrin repeat and SOCS box containing 7 | | |
| ASB8 | Ankyrin repeat and SOCS box containing 8 | PP14212 | |
| ASCC1 | Activating signal integrator 1 complex | CGI-18, ASC1p50, p50 | |
| ASCC3 | Activating signal integrator 1 complex | RP1-121G13.4, ASC1p200, HELIC1, RNAH | |
| ASF1B | Anti-silencing function 1B histone deacetylase | CIA-II | |
| ASFMR1 | FMR1 antisense RNA 1 | FMR4; ASFMR1; FMR1AS; FMR1-AS | |
| ASL | Argininosuccinate lyase | ASAL | |
| ASPH | Aspartate beta-hydroxylase | AAH, BAH, CASQ2BP1, FDLAB, HAAH, JCTN, junctin | |
| ASPHD1 | Aspartate beta-hydroxylase domain containing 1 | | |
| ASPN | Asporin | RP11-77D6.3, OS3, PLAP-1, PLAP1, SLRR1C | |
| ASRGL1 | Asparaginase like 1 | ALP, ALP1, CRASH | |
| ASTN1 | Astrotactin 1 | ASTN | |
| ASXL2 | Additional sex comb like transcriptional regulator 2 | ASXH2 | |
| ATAD2B | ATPase family, AAA domain containing 2B | | |
| ATAD3C | ATPase family, AAA domain containing 3C | RP4-628J24.1 | |
| ATF1 | ATPase family, AAA domain containing 3C | Activating transcription factor 1 | v |
| ATF2 | Activating transcription factor 2 | CRE-BP1, CREB-2, CREB2, HB16, TREB7 | |
| ATF6 | Activating transcription factor 6 | ATF6A | |
| ATF7 | Activating transcription factor 7 | ATFA | |
| ATF7IP2 | Activating transcription factor 7 interacting protein 2 | MCAF2 | |

| | | | |
|----------|---|--|---|
| ATG10 | Autophagy related 10 | PP12616, APG10, APG10L, pp12616 | |
| ATG16L1 | Autophagy related 16-like 1 | hCCU_16178+1, ATG10L, ATG10A, ATG10L, IDDT0, WDR20 | |
| ATG2B | Autophagy related 2B | C14orf103 | |
| ATG4B | Autophagy related 4B, cysteine peptidase | APG4B, AUTL1 | |
| ATG5 | Autophagy related 5 | APG5, APG5-LIKE, APG5L, ASP, hAPG5 | |
| ATG7 | Autophagy related 7 | APG7-LIKE, APG7L, GSA7 | |
| ATL1 | Atlastin GTPase 1 | AD-FSP, FSP1, GBP3, HSN1D, SPG3, SPG3A, atlastin1 | |
| ATL2 | Atlastin GTPase 2 | ARL3IP2, ARL6IP2, atlastin2 | |
| ATM | ATM serine/threonine kinase | AT1, ATA, ATC, ATD, ATDC, ATE, TEL1, TELO1 | v |
| ATMIN | ATM interactor | ASCIZ, ZNF822 | |
| ATP10B | ATPase, class V, type 10B | ATPVB | |
| ATP10D | ATPase, class V, type 10D | ATPVD | |
| ATP11A | ATPase, class VI, type 11A | RP11-120K24.1, ATP1H, ATPIS | |
| ATP11B | ATPase, class VI, type 11B | ATPIF, ATPIR | |
| ATP11C | ATPase, class VI, type 11C | RP11-197K18.1, ATPIG, ATPIQ | |
| ATP13A2 | ATPase type 13A2 | RP1-37C10.4, CLN12, HSA9947, KRPPD, PARK9 | |
| ATP13A3 | ATPase type 13A3 | AFURS1 | |
| ATP1A2 | ATPase, Na ⁺ /K ⁺ transporting, alpha 2 | RP11-536C5.4, FHM2, MHP2 | |
| ATP1A4 | ATPase, Na ⁺ /K ⁺ transporting, alpha 4 | RP11-536C5.5, ATP1A1, ATP1AL2 | |
| ATP1B1 | ATPase, Na ⁺ /K ⁺ transporting, beta 1 | ATP1B | |
| ATP1B2 | ATPase, Na ⁺ /K ⁺ transporting, beta 2 | AMOG | |
| ATP2A2 | ATPase, Ca ⁺⁺ transporting, cardiac muscle, slow-twitch | ATP2B, DAR, DD, SERCA2 | |
| ATP2B1 | ATPase, Ca ⁺⁺ transporting, plasma membrane | PMCA1, PMCA1kb | |
| ATP2B2 | ATPase, Ca ⁺⁺ transporting, plasma membrane | PMCA2, PMCA2a, PMCA2i | |
| ATP2B3 | ATPase, Ca ⁺⁺ transporting, plasma membrane | CFAP39, CLA2, OPCA, PMCA3, PMCA3a, SCAX1 | v |
| ATP2B4 | ATPase, Ca ⁺⁺ transporting, plasma membrane | ATP2B2, MXRA1, PMCA4, PMCA4b, PMCA4x | |
| ATP4B | ATPase, H ⁺ /K ⁺ exchanging, beta polypeptide | RP11-230F18.4, ATP6B | |
| ATP5F1 | ATP synthase, H ⁺ transporting, mitochondrial F1Fo complex | RP11-552M11.5, PIG47 | |
| ATP5G3 | ATP synthase, H ⁺ transporting, mitochondrial F1Fo complex | P3 | |
| ATP5SL | ATP5S-like | | |
| ATP6AP1 | ATPase, H ⁺ transporting, lysosomal V0 domain 1 | AAATW85505D9.4, 10A, ATP6H1, ATP6S1, AC45, C12, HAT28, YAR3, YAP2 | |
| ATP6AP2 | ATPase, H ⁺ transporting, lysosomal V0 domain 2 | AAATW85505D9.4, 10A, ATP6H2, ATP6M8-9, EEDT10, M8-A2, MRVE, MRVCLL, MSTP000, PPP, PBNP, VMDF | |
| ATP6V0A2 | ATPase, H ⁺ transporting, lysosomal V0 domain 2 | AAATW85505D9.4, 10A, ATP6H2, ATP6M8-9, EEDT10, M8-A2, MRVE, MRVCLL, MSTP000, PPP, PBNP, VMDF, STV1, TIC, TICM, TIC6, VPH1, WSS | |

| | | | |
|----------|---|---|---|
| ATP6V0D2 | ATPase, H ⁺ transporting, lysosomal 38 kDa, | ATP6D2, VMA6 | |
| ATP6V0E1 | ATPase, H ⁺ transporting, lysosomal 9 kDa, | ATP6H, ATP6V0E, M9.2, Vma21, Vma21p | |
| ATP6V1A | ATPase, H ⁺ transporting, lysosomal 70 kDa, | ATP6A11, HO68, VA68, VPP2, Vma1, ATP6V1A | |
| ATP6V1C2 | ATPase, H ⁺ transporting, lysosomal 42 kDa, | ATP6C2, VMA5 | |
| ATP6V1E1 | ATPase, H ⁺ transporting, lysosomal 31 kDa, | ATP6E, ATP6E2, ATP6V1E, P31, Vma4 | |
| ATP6V1G2 | ATPase, H ⁺ transporting, lysosomal 13 kDa, | DADB-26I14.6, ATP6G, ATP6G2, NG38, VMA10 | |
| ATP6V1H | ATPase, H ⁺ transporting, lysosomal 50/57 | CGI-11, MSTP042, NBP1, SPD, SPDbalpha, SPDbeta, VMA12 | |
| ATP7A | ATPase, Cu ⁺⁺ transporting, alpha | RP3-465G10.1, DSMAX, MK, MNK, SMAX3 | |
| ATP7B | ATPase, Cu ⁺⁺ transporting, beta polypeptide | RP11-327P2.1, PWD, WC1, WD, WND | |
| ATP8A1 | ATPase, aminophosphonate transporter | ATPASEII, ATPIA, ATPP2 | |
| ATP8A2 | ATPase, aminophosphonate transporter, | RP11-141F12.1, ATP, ATPIB, CAMRQ4, IB, ML-1 | |
| ATP8B1 | ATPase, aminophosphonate transporter, | ATPIC, BRIC, FIC1, ICP1, PFIC, PFIC1 | |
| ATP8B2 | ATPase, aminophosphonate transporter, | RP11-350G8.2, ATPID | |
| ATP8B4 | ATPase, class I, type 8B, member 4 | ATPIM | |
| ATP9B | ATPase, class II, type 9B | HUSSY-20, ATPASEP, ATPIIB, NEO1L, hMMR1 | |
| ATPAF1 | ATP synthase mitochondrial F1 complex | ATP11, ATP11p | |
| ATPAF2 | ATP synthase mitochondrial F1 complex | LP3663, ATP12, ATP12p, MC5DN1 | |
| ATPBD4 | | | |
| ATRN | Attractin | DPPT-L, MGCA | |
| ATRNL1 | Attractin-like 1 | ALP, bA338L11.1, bA454H24.1 | |
| ATRX | Alpha thalassemia/mental retardation | RP3-875J14.1, ATRZ, JMS, MKAH11, KAD54, RAD54L, SEM1, SLS, YH2, YND, ZNF119 | v |
| ATXN1 | Ataxin 1 | ATX1, D6S504E, SCA1 | |
| ATXN10 | Ataxin 10 | RP1-37M3.7, E46L, HUMEEP, SCA10 | |
| ATXN1L | Ataxin 1-like | hCG_1646491, BOAT, BOAT1 | |
| ATXN2 | Ataxin 2 | ASL13, ATX2, SCA2, TNRC13 | |
| ATXN3 | Ataxin 3 | RP11-529H20.5, AT3, ATX3, JOS, MJD, MJD1, SCA3 | |
| ATXN7 | Ataxin 7 | ADCAII, OPCA3, SCA7 | |
| ATXN7L1 | Ataxin 7-like 1 | tcag7.1150, ATXN7L4 | |
| ATXN7L3B | Ataxin 7-like 3B | | |
| ATXN8OS | ATXN8 opposite strand (non-protein coding) | KLHL1AS, NCRNA00003, SCA8 | |
| AUH | AO RNA binding protein/enoyl-CoA | | |
| AUTS2 | Autism susceptibility candidate 2 | FBRSL2, MRD26 | |
| AVL9 | AVL9 homolog (<i>S. cerevisiae</i>) | KIAA0241 | |

| | | | |
|----------|---|---|---|
| AXL | AXL receptor tyrosine kinase | JTK11, UFO | |
| AZI2 | 5-Azacytidine induced 2 | AZ2, NAP1, TILP | |
| AZIN1 | Antizyme inhibitor | AZI, AZIA1, OAZI, OAZIN, ODC1L | |
| B2M | Beta-2-microglobulin | CDABP0092 | |
| B3GALNT2 | Beta-1,3-N-acetylgalactosaminyltransferase 2 | B3GalNAc-T2, MDDGA11 | |
| B3GALT1 | Beta-3-galactosyltransferase 1 | beta3Gal-T1 | |
| B3GALT2 | Beta-3-galactosyltransferase 2 | BETA3GALT2, GLCT2, beta3Gal-T2 | |
| B3GALT5 | Beta-3-galactosyltransferase 5 | B3GALT-V, B3GALT-X, B3T5, GLCT5, beta-1,3-GalTase 5, KT112-567, CT5.1, B3GLCT5, B3GTL, B3GIC-1, Gal-1, beta3Gal-T | |
| B3GALTL | Beta 1,3-galactosyltransferase-like | | |
| B3GNT5 | Beta-1,3-galactosyltransferase 5 | B3GN-T5, beta3Gn-T5 | |
| B3GNT6 | Beta-1,3-galactosyltransferase 6 | B3Gn-T6, BGnT-6, beta-1,3-Gn-T6, beta3Gn-T6 | |
| B3GNT9 | Beta-1,3-galactosyltransferase 9 | UNQ1922/PRO4397 | |
| B4GALT1 | Beta-4-galactosyltransferase 1 | B4GAL-T1, CDG2D, GGTB2, GT1, GTB, beta4Gal-T1 | |
| B4GALT2 | Beta-4-galactosyltransferase 2 | B4Gal-T2, B4Gal-T3, beta4Gal-T2 | |
| B4GALT4 | Beta-4-galactosyltransferase 4 | UNQ552/PRO1109, B4Gal-T4, beta4Gal-T4 | |
| B4GALT5 | Beta-4-galactosyltransferase 5 | KT5-1005B2.1, B4Gal-T5, BETA4-GALT-IV, beta4Gal-T5, beta4Gal-T V, B4V | |
| B4GALT6 | Beta-4-galactosyltransferase 6 | B4Gal-T6, beta4Gal-T6 | |
| B4GALT7 | Beta-4-galactosyltransferase 7 | UNQ748/PRO1478, EDSP1, XGALT1, XGPT1 | |
| BAAT | Bile acid CoA:amino acid N-acyltransferase | BACAT, BAT | |
| BACE2 | Beta-site APP-cleaving enzyme 2 | CDAT5, ALPLC, ALP50, ASI1, ASI21, DALZ, CEAT1, DPA | |
| BACH1 | BTD and CNC homology 1, basic leucine zipper transcription factor 1 | BACH-1, BTBD24 | |
| BACH2 | BTD and CNC homology 1, basic leucine zipper transcription factor 2 | RP11-63K6.2, BTBD25 | |
| BAG2 | BCL2-associated athanogene 2 | RP3-496N17.2, BAG-2, dJ417I1.2 | |
| BAG4 | BCL2-associated athanogene 4 | BAG-4, SODD | |
| BAG5 | BCL2-associated athanogene 5 | BAG-5 | |
| BAGE2 | B melanoma antigen family, member 2 | CT2.2 | |
| BAGE5 | B melanoma antigen family, member 5 | CT2.5 | |
| BAI3 | Brain-specific angiogenesis inhibitor 3 | | |
| BAIAP2 | BAI1-associated protein 2 | BAP2, FLAF3, IRSP53 | |
| BAMBI | BMP and activin membrane-bound inhibitor | NMA | |
| BANK1 | B-cell scaffold protein with ankyrin repeats | BANK | |
| BAP1 | BRCAT associated protein-1 (ubiquitin carboxyl-terminal hydrolase) | hucep-6, HUCEP-13, UCHL2 | v |
| BASE | | | |

| | | | |
|----------|---|---|---|
| BAT1 | | | |
| BAT2 | | | |
| BAT2L2 | | | |
| BAT5 | | | |
| BAX | BCL2-associated X protein | BCL2L4 | |
| BAZ1A | Bromodomain adjacent to zinc finger | HSPC317, ACF1, WALp1, WCRF180, hACF1 | |
| BAZ1B | Bromodomain adjacent to zinc finger | WBSCR10, WBSCR9, WSTF | |
| BAZ2A | Bromodomain adjacent to zinc finger | TIP5, WALp3 | |
| BAZ2B | Bromodomain adjacent to zinc finger | WALp4 | |
| BBOX1 | butyrobetaine (gamma), z-oxoglutarate | BBH, BBOX, G-BBH, gamma-BBH | |
| BBS12 | Bardet-Biedl syndrome 12 | C4orf24 | |
| BBS2 | Bardet-Biedl syndrome 2 | BBS | |
| BBS4 | Bardet-Biedl syndrome 4 | | |
| BBS7 | Bardet-Biedl syndrome 7 | BBS2L1 | |
| BBS9 | Bardet-Biedl syndrome 9 | B1, C18, D1, PTHB1 | |
| BBX | Bobby sox homolog (Drosophila) | ARTC1, HBP2, HSPC339, MDS001 | |
| BC036928 | | | |
| BCAM | Basal cell adhesion molecule (Lutheran | AU, CD239, LU, MSK19 | |
| BCAP29 | B-cell receptor-associated protein 29 | BAP29 | |
| BCAR3 | Breast cancer anti-estrogen resistance 3 | RP5-1033H22.1, NSP2, SH2D3B | |
| BCAS1 | Breast carcinoma amplified sequence 1 | AIBC1, NABC1 | |
| BCAS4 | Breast carcinoma amplified sequence 4 | RP5-1071L10.2, CNOL | |
| BCAT1 | Branched chain amino-acid transaminase 1, | RP11-025E10.4, BCATC, BCT1, BCAS9, MECA59, | |
| BCAT2 | Branched chain amino-acid transaminase 2, | DNAS121, DD18 | |
| BCHE | mitochondrial | BCAM, BCATM, BCT2, PP18 | |
| BCHE | Butyrylcholinesterase | CHE1, CHE2, E1 | |
| BCL11A | B-cell CLL/lymphoma 11A (zinc finger | BCL11A-L3, BCL11A-AL, BCL11A-M, CHT1, EVD9, | √ |
| BCL2 | protein) | UBEOTL5, ZNF856, BCL11A | |
| BCL2 | B-cell CLL/lymphoma 2 | Bcl-2, PPP1R50 | √ |
| BCL2L11 | BCL2-like 11 (apoptosis facilitator) | BAM, BIM, BOD | |
| BCL2L15 | BCL2-like 15 | Bfk, C1orf178 | |
| BCL2L2 | BCL2-like 2 | BCL-W, BCL2-L-2, BCLW, PPP1R51 | |
| BCL6 | B-cell CLL/lymphoma 6 | BCL5A, LAZ3, ZBTB27, ZNF51, BCL6 | √ |
| BCL6B | B-cell CLL/lymphoma 6, member B | BAZF, ZBTB28, ZNF62 | |
| BCL7A | B-cell CLL/lymphoma 7A | BCL7 | √ |

| | | | |
|---------|---|--|---|
| BCL9 | B-cell CLL/lymphoma 9 | LGS | √ |
| BCLAF1 | BCL2-associated transcription factor 1 | BTF, bK211L9.1 | |
| BCO2 | Beta-carotene oxygenase 2 | B-DIOX-II, BCDO2 | |
| BCOR | BCL6 corepressor | ANOP2, MAA2, MCOPS2 | √ |
| BCR | Breakpoint cluster region | ALL1, CML, D22S11, D22S662, PHL, BC | √ |
| BDH1 | 3-hydroxybutyrate dehydrogenase, type 1 | BDH, SDR9C1 | |
| BDKRB2 | Bradykinin receptor B2 | B2R, BK-2, BK2, BKR2, BRB2 | |
| BDNFOS | BDNF antisense RNA | BDNF, BDNFOS, BDNF-AS1, ANTI-BDNF, | |
| BDP1 | B double prime 1, subunit of RNA polymerase III transcription initiation factor | NSR258920, TAF5B1, TFC5, TFIIB, TFIIB150, TFIIB90, TFIIB | |
| BEND3 | BEN domain containing 3 | RP11-59I9.2, KIAA1553 | |
| BEND4 | BEN domain containing 4 | CCDC4 | |
| BEND6 | BEN domain containing 6 | RP11-203B9.5, C6orf65, bA203B9.1 | |
| BEND7 | BEN domain containing 7 | C10orf30 | |
| BEST4 | Bestrophin 4 | RP11-269F19.5, VMD2L2 | |
| BET1 | Bet1 golgi vesicular membrane trafficking protein like | HBET1 | |
| BET1L | Bet1 golgi vesicular membrane trafficking protein like | BET1L1, GOLIM3, GS15, HSPC197 | |
| BEX2 | Brain expressed X-linked 2 | RP1-79P11.1, BEX1, DJ79P11.1 | |
| BEX4 | Brain expressed, X-linked 4 | RP4-635G19.2, BEXL1 | |
| BEYLA | | | |
| BHLHE22 | Basic helix-loop-helix family, member e22 | BHLHB5, Beta3, CAGL85, TNRC20 | |
| BHLHE40 | Basic helix-loop-helix family, member e40 | BHLHB2, DEC1, HLHB2, SHARP-2, STRA13, Stra14 | |
| BHMT2 | Betaine-homocysteine S-methyltransferase 2 | | |
| BICD2 | Bicaudal D homolog 2 (Drosophila) | RP11-476B13.3, SMALED2, bA526D8.1 | |
| BID | BH3 interacting domain death agonist | FP497 | |
| BIRC5 | Baculoviral IAP repeat containing 5 | API4, EPR-1 | |
| BIRC6 | Baculoviral IAP repeat containing 6 | APOLLON, BRUCE | |
| BIVM | Basic, immunoglobulin-like variable motif containing | RP11-484I6.1 | |
| BLCAP | Bladder cancer associated protein | RP11-425M5.2, BC10 | |
| BLOC1S2 | Biogenesis of lysosomal organelles complex-1, subunit 2 | RP11-316M21.4, BLOS2, CEAP, CEAP11 | |
| BLZF1 | Basic leucine zipper nuclear factor 1 | RP1-206D15.1, GOLGIN-45, JEM-1, JEM-1s, JEM1 | |
| BMF | Bcl2 modifying factor | | |
| BMP1 | Bone morphogenetic protein 1 | OI13, PCOLC, PCP, PCP2, TLD | |
| BMP2 | Bone morphogenetic protein 2 | BDA2A,BMP2 | |

| | | | |
|--------|--|--|---|
| BMP3 | Bone morphogenetic protein 3 | BMP-3A | |
| BMP7 | Bone morphogenetic protein | RP11-560A15.5, OP-1 | |
| BMP8A | Bone morphogenetic protein 8a | | |
| BMP8B | Bone morphogenetic protein 8b | BMP8, OP2 | |
| BMPER | BMP binding endothelial regulator | CRIM3, CV-2, CV2 | |
| BMPR2 | Bone morphogenetic protein receptor, type II (serine/threonine kinase) | BMPRII, BMPRI3, BMPRI4, BMPRI5, BMPRI6, BMPRI7, BMPRI8, BMPRI9, BMPRI10, BMPRI11, BMPRI12, BMPRI13, BMPRI14, BMPRI15, BMPRI16, BMPRI17, BMPRI18, BMPRI19, BMPRI20, BMPRI21, BMPRI22, BMPRI23, BMPRI24, BMPRI25, BMPRI26, BMPRI27, BMPRI28, BMPRI29, BMPRI30, BMPRI31, BMPRI32, BMPRI33, BMPRI34, BMPRI35, BMPRI36, BMPRI37, BMPRI38, BMPRI39, BMPRI40, BMPRI41, BMPRI42, BMPRI43, BMPRI44, BMPRI45, BMPRI46, BMPRI47, BMPRI48, BMPRI49, BMPRI50, BMPRI51, BMPRI52, BMPRI53, BMPRI54, BMPRI55, BMPRI56, BMPRI57, BMPRI58, BMPRI59, BMPRI60, BMPRI61, BMPRI62, BMPRI63, BMPRI64, BMPRI65, BMPRI66, BMPRI67, BMPRI68, BMPRI69, BMPRI70, BMPRI71, BMPRI72, BMPRI73, BMPRI74, BMPRI75, BMPRI76, BMPRI77, BMPRI78, BMPRI79, BMPRI80, BMPRI81, BMPRI82, BMPRI83, BMPRI84, BMPRI85, BMPRI86, BMPRI87, BMPRI88, BMPRI89, BMPRI90, BMPRI91, BMPRI92, BMPRI93, BMPRI94, BMPRI95, BMPRI96, BMPRI97, BMPRI98, BMPRI99, BMPRI100 | |
| BMS1 | BMS1 ribosome biogenesis factor | AL022344.1, ACCL, BMS1 | |
| BNC2 | Basonuclin 2 | RP11-183I6.1, BSN2 | |
| BNIP2 | BCL2/adenovirus E1B 19 kDa interacting protein 2 | BNIP-2, NIP2 | |
| BNIP1 | BCL2/adenovirus E1B 19 kDa interacting protein 1 | BNIP1, BNIP2, BNIP3, BNIP4, BNIP5, BNIP6, BNIP7, BNIP8, BNIP9, BNIP10, BNIP11, BNIP12, BNIP13, BNIP14, BNIP15, BNIP16, BNIP17, BNIP18, BNIP19, BNIP20, BNIP21, BNIP22, BNIP23, BNIP24, BNIP25, BNIP26, BNIP27, BNIP28, BNIP29, BNIP30, BNIP31, BNIP32, BNIP33, BNIP34, BNIP35, BNIP36, BNIP37, BNIP38, BNIP39, BNIP40, BNIP41, BNIP42, BNIP43, BNIP44, BNIP45, BNIP46, BNIP47, BNIP48, BNIP49, BNIP50, BNIP51, BNIP52, BNIP53, BNIP54, BNIP55, BNIP56, BNIP57, BNIP58, BNIP59, BNIP60, BNIP61, BNIP62, BNIP63, BNIP64, BNIP65, BNIP66, BNIP67, BNIP68, BNIP69, BNIP70, BNIP71, BNIP72, BNIP73, BNIP74, BNIP75, BNIP76, BNIP77, BNIP78, BNIP79, BNIP80, BNIP81, BNIP82, BNIP83, BNIP84, BNIP85, BNIP86, BNIP87, BNIP88, BNIP89, BNIP90, BNIP91, BNIP92, BNIP93, BNIP94, BNIP95, BNIP96, BNIP97, BNIP98, BNIP99, BNIP100 | |
| BNIP2 | BCL2/adenovirus E1B 19 kDa interacting protein 2 | BNIP-2, NIP2 | |
| BNIP1 | BCL2/adenovirus E1B 19 kDa interacting protein 1 | BNIP1, BNIP2, BNIP3, BNIP4, BNIP5, BNIP6, BNIP7, BNIP8, BNIP9, BNIP10, BNIP11, BNIP12, BNIP13, BNIP14, BNIP15, BNIP16, BNIP17, BNIP18, BNIP19, BNIP20, BNIP21, BNIP22, BNIP23, BNIP24, BNIP25, BNIP26, BNIP27, BNIP28, BNIP29, BNIP30, BNIP31, BNIP32, BNIP33, BNIP34, BNIP35, BNIP36, BNIP37, BNIP38, BNIP39, BNIP40, BNIP41, BNIP42, BNIP43, BNIP44, BNIP45, BNIP46, BNIP47, BNIP48, BNIP49, BNIP50, BNIP51, BNIP52, BNIP53, BNIP54, BNIP55, BNIP56, BNIP57, BNIP58, BNIP59, BNIP60, BNIP61, BNIP62, BNIP63, BNIP64, BNIP65, BNIP66, BNIP67, BNIP68, BNIP69, BNIP70, BNIP71, BNIP72, BNIP73, BNIP74, BNIP75, BNIP76, BNIP77, BNIP78, BNIP79, BNIP80, BNIP81, BNIP82, BNIP83, BNIP84, BNIP85, BNIP86, BNIP87, BNIP88, BNIP89, BNIP90, BNIP91, BNIP92, BNIP93, BNIP94, BNIP95, BNIP96, BNIP97, BNIP98, BNIP99, BNIP100 | |
| BOD1 | Biorientation of chromosomes in cell division 1 | FAM44B | |
| BOD1L | Biorientation of chromosomes in cell division 1-like 1 | BOD1L, FAM44A | |
| BOK | BCL2-related ovarian killer | BCL2L9L, BOK | |
| BOLL | Boule-like RNA-binding protein | BOULE | |
| BPESC1 | Brepharopinnosis, epicanthus inversus and ectopic candidate 1 (non-protein coding) | NCRNA00187 | |
| BPIL2 | BPI fold containing family C | RP1-149A16.10-011, BPIL2 | |
| BPNT1 | 3'(2'), 5'-Bisphosphate nucleotidase 1 | HEL20, PIP | |
| BPTF | Bromodomain PHD finger transcription factor | FAC1, FALZ, NURF301 | |
| BPY2 | Basic charge, Y-linked, 2 | BPY2A, VCY2, VCY2A | |
| BRAP | BRCA1 associated protein | BRAP2, IMP, RNF52 | |
| BRCA1 | Breast cancer 1, early onset | CAL, BRCC1, BROVCA1, INB, FNCA4, FTTKJ5, RSCB, RNF52 | v |
| BRCC3 | BRCA1/BRCA2-containing complex, subunit 3 | RP11-143H17.26, C6.1A, CXorf53, BRCC3 | |
| BRD1 | Bromodomain containing 1 | RP3-522J7.4, BRL, BRPF1, BRPF2 | |
| BRDT | Bromodomain, testis-specific | BRD6, CT9 | |
| BRE | Bromodomain, testis-specific | BRD6, CT9 | |
| BRMS1L | Breast cancer metastasis-suppressor 1-like | BRMS1 | |
| BRPF3 | Bromodomain and PHD finger containing, 3 | RP3-524E15.1 | |
| BRWD1 | Bromodomain and WD repeat domain containing 1 | C21orf107, N143, WDR9 | |
| BSDC1 | BSD domain containing 1 | RP4-811H24.7 | |
| BSN | Bassoon presynaptic cytomatrix protein | ZNF231 | |
| BSPRY | B-box and SPRY domain containing | | |
| BTAFL1 | BTAFL RNA polymerase II, B-TAFII transcription factor associated, 170 kDa | MOT1, TAF(II)170, TAF172, TAFIII170 | |
| BTBD10 | BTB (POZ) domain containing 10 | GMRP-1, GMRP1 | |

| | | | |
|-----------|---|---|---|
| BTBD11 | BTB (POZ) domain containing 11 | ABTB2B | |
| BTBD12 | | | |
| BTBD3 | BTB (POZ) domain containing 3 | RP4-742J24.3, dJ742J24.1 | |
| BTBD7 | BTB (POZ) domain containing 7 | FUP1 | |
| BTBD8 | BTB (POZ) domain containing 8 | | |
| BTBD9 | BTB (POZ) domain containing 9 | RP3-322I12.1, dJ322I12.1 | |
| BTC | Betacellulin | | |
| BTF3L4 | Basic transcription factor 3-like 4 | RP4-800M22.5 | |
| BTG1 | B-cell translocation gene 1, anti-proliferative | B-cell translocation gene 1, anti-proliferative | v |
| BTG2 | BTG family, member 2 | PC3, TIS21 | |
| BTLA | B and T lymphocyte associated | BTLA1, CD272 | |
| BTN2A1 | Butyrophilin, subfamily 2, member A1 | C1A-141D.1, DK141D.1, BT2.1, BT11, BTN2.1, BT2E1.1 | |
| BTN3A1 | Butyrophilin, subfamily 3, member A1 | RP1-45P21.1, BT3.1, BTF5, BTN3.1, CD277 | |
| BTNL3 | Butyrophilin-like 3 | UNQ744/PRO1472, BTN9.1, BTNLR | |
| BTNL8 | Butyrophilin-like 8 | UNQ702/PRO1347, BTN9.2 | |
| BTRC | Beta-transducin repeat containing E3 ubiquitin protein ligase | RP11-529H0.2, BETA-TRCP, FBW1A, FBXW1, FRYW1A, FWD1, LT-CP, LT-CP1, hscT-CP | |
| BUB3 | BUB3 mitotic checkpoint protein | BUB3L, hBUB3 | |
| BUD31 | BUD31 homolog <i>B1028</i> | Cwc14, EDG-2, EDG2, G10, YCR063W, fSAP17 | |
| BVES | Blood vessel epicardial substance | RP3-522O2.1, HBVES, POP1, POPDC1 | |
| BZW2 | Basic leucine zipper and W2 domains 2 | HSPC028, MST017, MSTP017 | |
| C10orf10 | Chromosome 10 open reading frame 10 | DEPP, FIG, Fseg | |
| C10orf108 | | | |
| C10orf112 | | | |
| C10orf116 | | | |
| C10orf118 | | | |
| C10orf119 | | | |
| C10orf12 | Chromosome 10 open reading frame 12 | | |
| C10orf122 | | | |
| C10orf4 | Chromosome 10 open reading frame 4 | | |
| C10orf41 | Chromosome 10 open reading frame 4 | | |
| C10orf44 | | | |
| C10orf46 | | | |
| C10orf54 | Chromosome 10 open reading frame 54 | RP11-472K8.3, B7-H5, B7H5, GI24, PP2135, SISP1 | |

| | | | |
|----------|-------------------------------------|---|--|
| C10orf67 | Chromosome 10 open reading frame 67 | RP11-792P23.2 | |
| C10orf68 | | | |
| C10orf72 | | | |
| C10orf75 | | | |
| C10orf76 | Chromosome 10 open reading frame 76 | RP11-190J1.9 | |
| C10orf78 | | | |
| C10orf79 | | | |
| C10orf84 | | | |
| C10orf88 | Chromosome 10 open reading frame 88 | | |
| C10orf96 | | | |
| C11orf16 | Chromosome 11 open reading frame 16 | | |
| C11orf17 | | | |
| C11orf30 | | | |
| C11orf34 | | | |
| C11orf41 | | | |
| C11orf46 | | | |
| C11orf53 | Chromosome 11 open reading frame 53 | | |
| C11orf58 | Chromosome 11 open reading frame 58 | IMAGE145052, SMAP | |
| C11orf59 | | | |
| C11orf64 | | | |
| C11orf68 | Chromosome 11 open reading frame 68 | BLES03, P5326 | |
| C11orf71 | Chromosome 11 open reading frame 71 | | |
| C11orf73 | Chromosome 11 open reading frame 73 | HSPC138, HSPC179, Hikeshi, L7RN6, OPI10 | |
| C11orf74 | Chromosome 11 open reading frame 74 | HEPIS | |
| C11orf75 | | | |
| C11orf76 | | | |
| C11orf87 | Chromosome 11 open reading frame 87 | LOH11CR1A, NEURIM1 | |
| C11orf92 | | | |
| C12orf12 | | | |
| C12orf23 | | | |
| C12orf29 | Chromosome 12 open reading frame 29 | | |
| C12orf34 | | | |
| C12orf35 | | | |

| | | | |
|-----------|--------------------------------------|--------------------------|--|
| C12orf4 | Chromosome 12 open reading frame 4 | | |
| C12orf41 | | | |
| C12orf49 | Chromosome 12 open reading frame 49 | | |
| C12orf5 | Chromosome 12 open reading frame 5 | FR2BP, TIGAR | |
| C12orf51 | | | |
| C12orf56 | Chromosome 12 open reading frame 56 | | |
| C12orf62 | | | |
| C12orf64 | | | |
| C12orf66 | Chromosome 12 open reading frame 66 | | |
| C12orf68 | | | |
| C12orf69 | | | |
| C12orf72 | | | |
| C12orf75 | Chromosome 12 open reading frame 75 | AGD3, OCC-1, OCC1 | |
| C12orf76 | Chromosome 12 open reading frame 76 | | |
| C12orf77 | Chromosome 12 open reading frame 77 | | |
| C13orf1 | Chromosome 13 open reading frame 1 | | |
| C13orf23 | | | |
| C13orf30 | | | |
| C13orf34 | | | |
| C13orf36 | | | |
| C13orf37 | | | |
| C13orf38 | | | |
| C14orf101 | | | |
| C14orf118 | | | |
| C14orf119 | Chromosome 14 open reading frame 119 | My028 | |
| C14orf126 | Chromosome 14 open reading frame 126 | MGC9912 | |
| C14orf129 | | | |
| C14orf135 | | | |
| C14orf139 | | | |
| C14orf142 | Chromosome 14 open reading frame 142 | PNAS-127 | |
| C14orf143 | | | |
| C14orf153 | | | |
| C14orf169 | Chromosome 14 open reading frame 169 | MAPJD, NO66, ROX, hsNO66 | |

| | | | |
|-----------|--------------------------------------|-------------------------|--|
| C14orf177 | Chromosome 14 open reading frame 177 | | |
| C14orf178 | Chromosome 14 open reading frame 178 | | |
| C14orf181 | Chromosome 14 open reading frame 181 | | |
| C14orf184 | Chromosome 14 open reading frame 184 | PP8961 | |
| C14orf2 | Chromosome 14 open reading frame 2 | PRO1574, MP68, PLPM | |
| C14orf28 | Chromosome 14 open reading frame 28 | DRIP-1, DRIP1, c14_5270 | |
| C14orf37 | Chromosome 14 open reading frame 37 | c14_5376 | |
| C14orf4 | | | |
| C14orf41 | Chromosome 14 open reading frame 41 | c14_5527 | |
| C14orf43 | | | |
| C14orf45 | Chromosome 14 open reading frame 45 | | |
| C15orf2 | | | |
| C15orf23 | | | |
| C15orf26 | Chromosome 15 open reading frame 26 | | |
| C15orf29 | | | |
| C15orf34 | | | |
| C15orf48 | Chromosome 15 open reading frame 48 | FOAP-11, NMES1 | |
| C15orf50 | | | |
| C15orf52 | Chromosome 15 open reading frame 52 | | |
| C15orf54 | Chromosome 15 open reading frame 54 | | |
| C15orf56 | Chromosome 15 open reading frame 56 | | |
| C16orf46 | Chromosome 16 open reading frame 46 | | |
| C16orf53 | | | |
| C16orf55 | | | |
| C16orf62 | Chromosome 16 open reading frame 62 | 101F10.2 | |
| C16orf63 | | | |
| C16orf70 | Chromosome 16 open reading frame 70 | C16orf6, LIN10, lin-10 | |
| C16orf71 | Chromosome 16 open reading frame 71 | | |
| C16orf72 | Chromosome 16 open reading frame 72 | PRO0149 | |
| C16orf75 | | | |
| C16orf87 | Chromosome 16 open reading frame 87 | | |
| C16orf90 | Chromosome 16 open reading frame 90 | | |
| C17orf100 | Chromosome 17 open reading frame 100 | hCG_1985469 | |

| | | | |
|-----------|--------------------------------------|------------------------------------|--|
| C17orf102 | Chromosome 17 open reading frame 102 | | |
| C17orf104 | Chromosome 17 open reading frame 104 | | |
| C17orf108 | | | |
| C17orf39 | | | |
| C17orf51 | Chromosome 17 open reading frame 51 | | |
| C17orf53 | Chromosome 17 open reading frame 53 | | |
| C17orf54 | | | |
| C17orf57 | | | |
| C17orf59 | Chromosome 17 open reading frame 59 | PRO2472 | |
| C17orf63 | | | |
| C17orf69 | | | |
| C17orf72 | | | |
| C17orf76 | | | |
| C17orf80 | Chromosome 17 open reading frame 80 | HLC8, HLC-8, MIG3, SPEP1 | |
| C17orf85 | Chromosome 17 open reading frame 85 | ELG, HSA277841 | |
| C17orf87 | | | |
| C17orf91 | | | |
| C18orf1 | | | |
| C18orf16 | | | |
| C18orf19 | | | |
| C18orf20 | | | |
| C18orf21 | Chromosome 18 open reading frame 21 | PNAS-124, HsT3108, PNAS-131, XTP13 | |
| C18orf22 | | | |
| C18orf25 | Chromosome 18 open reading frame 25 | ARKL1, RNF111L1 | |
| C18orf34 | | | |
| C18orf45 | | | |
| C18orf49 | Chromosome 18 open reading frame 49 | | |
| C18orf54 | Chromosome 18 open reading frame 54 | LAS2 | |
| C18orf55 | | | |
| C18orf8 | Chromosome 18 open reading frame 8 | HsT2591, MIC1, Mic-1 | |
| C19orf12 | Chromosome 19 open reading frame 12 | NBIA3, NBIA4, SPG43 | |
| C19orf2 | | | |
| C19orf25 | Chromosome 19 open reading frame 25 | | |

| | | | |
|----------|--|--------------------|--|
| C19orf28 | | | |
| C19orf42 | | | |
| C19orf44 | Chromosome 19 open reading frame 44 | | |
| C19orf50 | | | |
| C19orf54 | Chromosome 19 open reading frame 54 | | |
| C19orf59 | | | |
| C19orf61 | | | |
| C19orf62 | | | |
| C19orf63 | | | |
| C19orf66 | Chromosome 19 open reading frame 66 | | |
| C19orf75 | | | |
| C1GALT1 | Core 1 synthase, glycoprotein-N-acetylglucosaminase 2 beta | C1GALT, T-synthase | |
| C1orf107 | | | |
| C1orf109 | Chromosome 1 open reading frame 109 | | |
| C1orf110 | Chromosome 1 open reading frame 110 | RP11-331H2.2 | |
| C1orf112 | Chromosome 1 open reading frame 112 | RP1-97P20.1 | |
| C1orf113 | | | |
| C1orf116 | Chromosome 1 open reading frame 116 | SARG | |
| C1orf125 | | | |
| C1orf131 | Chromosome 1 open reading frame 131 | RP4-609B14.1 | |
| C1orf146 | Chromosome 1 open reading frame 146 | RP11-163M2.3 | |
| C1orf151 | | | |
| C1orf161 | | | |
| C1orf167 | Chromosome 1 open reading frame 167 | RP11-56N19.2 | |
| C1orf168 | Chromosome 1 open reading frame 168 | RP4-758N20.2 | |
| C1orf174 | Chromosome 1 open reading frame 174 | RP13-531C17.2 | |
| C1orf175 | | | |
| C1orf180 | Chromosome 1 open reading frame 180 | | |
| C1orf185 | Chromosome 1 open reading frame 185 | RP11-296A18.1 | |
| C1orf186 | Chromosome 1 open reading frame 186 | | |
| C1orf21 | Chromosome 1 open reading frame 21 | RP4-768P8.1, PIG13 | |
| C1orf211 | | | |
| C1orf220 | Chromosome 1 open reading frame 220 | RP5-990P15.2 | |

| | | | |
|-----------|---|---|--|
| C1orf226 | Chromosome 1 open reading frame 226 | hCG_2036738 | |
| C1orf27 | Chromosome 1 open reading frame 27 | ODR4, TTG1, odr-4 | |
| C1orf43 | Chromosome 1 open reading frame 43 | HSPC012, NICE-3, NS5ATP4, S863-3 | |
| C1orf50 | Chromosome 1 open reading frame 50 | | |
| C1orf52 | Chromosome 1 open reading frame 52 | GM117, gm117 | |
| C1orf56 | Chromosome 1 open reading frame 56 | RP11-316M1.9, MENT | |
| C1orf57 | | | |
| C1orf63 | | | |
| C1orf69 | | | |
| C1orf83 | | | |
| C1orf84 | Chromosome 1 open reading frame 84 | RP11-506B15.1, SZT2A | |
| C1orf9 | Chromosome 1 open reading frame 9 | | |
| C1orf93 | | | |
| C1orf96 | | | |
| C1QTNF2 | C1q and tumor necrosis factor related protein 2 | UNQ6349/PRO21054, CTRP2, zacrp2 | |
| C1QTNF3 | C1q and tumor necrosis factor related protein 3 | UNQ7557/PRO1484, C1QTNF3, COKCS, COKS, COKS-26, COKS26, CTRP3 | |
| C1QTNF7 | C1q and tumor necrosis factor related protein 7 | CTRP7, ZACRP7 | |
| C1RL | Complement component 1, r subcomponent-1 | C1RL1P, C1r-LP, CLSPa, C1RL | |
| C20orf103 | | | |
| C20orf112 | | | |
| C20orf12 | | | |
| C20orf191 | Chromosome 20 open reading frame 191 | bB329D4.2 | |
| C20orf194 | | | |
| C20orf199 | | | |
| C20orf24 | Chromosome 20 open reading frame 24 | PNAS-11, RIP5 | |
| C20orf29 | | | |
| C20orf30 | | | |
| C20orf72 | | | |
| C20orf85 | Chromosome 20 open reading frame 85 | LLC1, bA196N14.1 | |
| C21orf105 | Chromosome 21 open reading frame 105 | | |
| C21orf119 | Chromosome 21 open reading frame 119 | PRED84 | |
| C21orf125 | | | |
| C21orf129 | | | |

| | | | |
|----------|--|---------------------------------------|--|
| C21orf34 | Chromosome 21 open reading frame 34 | | |
| C21orf49 | Chromosome 21 open reading frame 49 | | |
| C21orf74 | | | |
| C21orf82 | | | |
| C21orf91 | Chromosome 21 open reading frame 91 | C21orf14, C21orf38, CSSG1, EURL, YG81 | |
| C21orf94 | | | |
| C21orf99 | | | |
| C22orf13 | Chromosome 22 open reading frame 13 | | |
| C22orf25 | | | |
| C22orf28 | | | |
| C22orf29 | Chromosome 22 open reading frame 29 | BOP | |
| C22orf30 | | | |
| C22orf39 | Chromosome 22 open reading frame 39 | | |
| C22orf40 | | | |
| C22orf46 | Chromosome 22 open reading frame 46 | CTA-216E10.6 | |
| C22orf9 | Chromosome 22 open reading frame 9 | | |
| C2CD2 | C2 calcium-dependent domain containing 2 | C21orf25, C21orf258, TMEM24L | |
| C2CD2L | C2CD2-like | DLNB23, TMEM24 | |
| C2orf14 | Chromosome 2 open reading frame 14 | DKFZp434F1719 | |
| C2orf15 | Chromosome 2 open reading frame 15 | | |
| C2orf29 | | | |
| C2orf39 | | | |
| C2orf42 | Chromosome 2 open reading frame 42 | | |
| C2orf43 | Chromosome 2 open reading frame 43 | | |
| C2orf54 | Chromosome 2 open reading frame 54 | | |
| C2orf55 | | | |
| C2orf56 | | | |
| C2orf60 | | | |
| C2orf68 | Chromosome 2 open reading frame 68 | HCRCN81 | |
| C2orf69 | Chromosome 2 open reading frame 69 | | |
| C2orf71 | Chromosome 2 open reading frame 71 | RP54 | |
| C2orf73 | Chromosome 2 open reading frame 73 | | |
| C2orf74 | Chromosome 2 open reading frame 74 | | |

| | | | |
|---------|--|---------------------|--|
| C2orf80 | Chromosome 2 open reading frame 80 | GONDA1 | |
| C2orf83 | Chromosome 2 open reading frame 83 | | |
| C2orf86 | | | |
| C2orf88 | Chromosome 2 open reading frame 88 | smAKAP | |
| C2orf89 | | | |
| C2orf90 | | | |
| C3orf1 | Chromosome 3 open reading frame 1 | | |
| C3orf10 | | | |
| C3orf14 | Chromosome 3 open reading frame 14 | HT021 | |
| C3orf15 | | | |
| C3orf16 | | | |
| C3orf23 | | | |
| C3orf26 | | | |
| C3orf35 | Chromosome 3 open reading frame 35 | APRG1 | |
| C3orf42 | | | |
| C3orf43 | | | |
| C3orf52 | Chromosome 3 open reading frame 52 | TTMP | |
| C3orf55 | Chromosome 3 open reading frame 55 | | |
| C3orf58 | Chromosome 3 open reading frame 58 | DIA1, GoPro49, HASF | |
| C3orf59 | | | |
| C3orf62 | Chromosome 3 open reading frame 62 | | |
| C3orf64 | | | |
| C3orf65 | Chromosome 3 open reading frame 65 | | |
| C3orf67 | Chromosome 3 open reading frame 67 | | |
| C3orf74 | | | |
| C3P1 | Complement component 3 precursor <i>cc3</i> | CPLP | |
| C4orf19 | Chromosome 4 open reading frame 19 | | |
| C4orf23 | | | |
| C4orf29 | Chromosome 4 open reading frame 29 | | |
| C4orf3 | Chromosome 4 open reading frame 3 | | |
| C4orf33 | Chromosome 4 open reading frame 33 | | |
| C4orf34 | | | |
| C4orf35 | | | |

| | | | |
|----------|-------------------------------------|---------------------------------|--|
| C4orf38 | | | |
| C4orf40 | | | |
| C4orf41 | | | |
| C4orf43 | | | |
| C5 | Complement component 5 | | |
| C5AR1 | Complement component 5a receptor 1 | C5A, C5AR, C5R1, CD88 | |
| C5orf13 | | | |
| C5orf15 | Chromosome 5 open reading frame 15 | HTGN29, KCT2 | |
| C5orf20 | | | |
| C5orf22 | Chromosome 5 open reading frame 22 | | |
| C5orf23 | Chromosome 5 open reading frame 23 | | |
| C5orf28 | Chromosome 5 open reading frame 28 | | |
| C5orf30 | Chromosome 5 open reading frame 30 | | |
| C5orf33 | | | |
| C5orf34 | Chromosome 5 open reading frame 34 | | |
| C5orf36 | | | |
| C5orf4 | | | |
| C5orf41 | | | |
| C5orf43 | | | |
| C5orf44 | | | |
| C5orf46 | Chromosome 5 open reading frame 46 | UNQ472/PRO839, SSSP1 | |
| C5orf47 | Chromosome 5 open reading frame 47 | | |
| C5orf51 | Chromosome 5 open reading frame 51 | | |
| C5orf56 | Chromosome 5 open reading frame 56 | | |
| C5orf62 | | | |
| C6orf106 | Chromosome 6 open reading frame 106 | RP3-391O22.4, FP852, dJ391O22.4 | |
| C6orf114 | Chromosome 6 open reading frame 114 | ADG-90 | |
| C6orf115 | Chromosome 6 open reading frame 115 | HSPC280, PRO2013 | |
| C6orf122 | Chromosome 6 open reading frame 122 | FLJ31451, dJ266L20.5 | |
| C6orf130 | | | |
| C6orf132 | Chromosome 6 open reading frame 132 | bA7K24.2 | |
| C6orf134 | | | |
| C6orf141 | Chromosome 6 open reading frame 141 | | |

| | | | |
|----------|-------------------------------------|--|--|
| C6orf142 | | | |
| C6orf162 | | | |
| C6orf163 | Chromosome 6 open reading frame 163 | | |
| C6orf168 | | | |
| C6orf170 | | | |
| C6orf174 | | | |
| C6orf176 | | | |
| C6orf182 | Chromosome 6 open reading frame 182 | MGC21731, bA487F23.2 | |
| C6orf192 | | | |
| C6orf211 | Chromosome 6 open reading frame 211 | | |
| C6orf217 | Chromosome 6 open reading frame 217 | | |
| C6orf223 | Chromosome 6 open reading frame 223 | | |
| C6orf26 | chromosome 6 open reading frame 26 | NG23 | |
| C6orf35 | Chromosome 6 open reading frame 35 | BM033 | |
| C6orf62 | Chromosome 6 open reading frame 62 | RP1-30M3.4, Nbla00237, XTP12, dJ30M3.2 | |
| C6orf89 | Chromosome 6 open reading frame 89 | RP1-90K10.6, BRAP | |
| C6orf97 | | | |
| C7 | Complement component 7 | | |
| C7orf13 | Chromosome 7 open reading frame 13 | tcag7.556, MY040 | |
| C7orf16 | | | |
| C7orf27 | | | |
| C7orf28B | | | |
| C7orf31 | Chromosome 7 open reading frame 31 | | |
| C7orf41 | | | |
| C7orf42 | | | |
| C7orf46 | Chromosome 7 open reading frame 46 | | |
| C7orf52 | | | |
| C7orf53 | | | |
| C7orf54 | | | |
| C7orf57 | Chromosome 7 open reading frame 57 | | |
| C7orf58 | | | |
| C7orf60 | Chromosome 7 open reading frame 60 | | |
| C7orf63 | | | |

| | | | |
|----------|-------------------------------------|---|--|
| C7orf64 | | | |
| C7orf68 | | | |
| C7orf71 | Chromosome 7 open reading frame 71 | | |
| C8orf34 | Chromosome 8 open reading frame 34 | VEST-1, VEST1 | |
| C8orf38 | | | |
| C8orf41 | | | |
| C8orf44 | Chromosome 8 open reading frame 44 | | |
| C8orf59 | Chromosome 8 open reading frame 59 | | |
| C8orf68 | | | |
| C8orf76 | Chromosome 8 open reading frame 76 | | |
| C8orf79 | Chromosome 8 open reading frame 79 | | |
| C8orf81 | | | |
| C8orf83 | | | |
| C8orf84 | | | |
| C9 | Complement component 9 | ARMD15D, C9 | |
| C9orf100 | | | |
| C9orf102 | Chromosome 9 open reading frame 102 | RP11-346B7.2, SR278 | |
| C9orf109 | | | |
| C9orf11 | | | |
| C9orf110 | Chromosome 9 open reading frame 110 | | |
| C9orf128 | | | |
| C9orf144 | | | |
| C9orf167 | | | |
| C9orf170 | Chromosome 9 open reading frame 170 | | |
| C9orf21 | | | |
| C9orf23 | | | |
| C9orf25 | | | |
| C9orf3 | Chromosome 9 open reading frame 3 | RP11-80I15.5, AOPEP, AP-O, APO, C90RF3, ONPEP | |
| C9orf30 | | | |
| C9orf40 | Chromosome 9 open reading frame 40 | | |
| C9orf44 | | | |
| C9orf47 | Chromosome 9 open reading frame 47 | C9orf108, bA791O21.3 | |
| C9orf5 | | | |

| | | | |
|----------|---|--|--|
| C9orf62 | Chromosome 9 open reading frame 62 | RP11-555H7.1 | |
| C9orf68 | | | |
| C9orf71 | | | |
| C9orf72 | Chromosome 9 open reading frame 72 | ALSFTD, FTDALS | |
| C9orf73 | Chromosome 9 open reading frame 73 | | |
| C9orf80 | | | |
| C9orf85 | Chromosome 9 open reading frame 85 | RP11-346E17.2 | |
| C9orf91 | Chromosome 9 open reading frame 91 | RP11-402G3.2 | |
| C9orf93 | | | |
| C9orf96 | | | |
| CA10 | Carbonic anhydrase X | hucep-15, CA-RPX, CARPX, HUCEP-15 | |
| CA12 | Carbonic anhydrase XII | CAXII, HsT18816 | |
| CA13 | Carbonic anhydrase XIII | CAXIII | |
| CA3 | Carbonic anhydrase III, muscle specific | CAIII, Car3 | |
| CA5B | Carbonic anhydrase VB, mitochondrial | CA-VB | |
| CA8 | Carbonic anhydrase VIII | CA-VIII, CALS, CAMRQ3, CARP | |
| CA9 | Carbonic anhydrase IX | CAIX, MN | |
| CAB39 | Calcium binding protein 39 | CGI-66, MO25 | |
| CAB39L | Calcium binding protein 39-like | RP11-103J18.3, MO25-BETA, MO2L, bA103J18.3 | |
| CABC1 | Chaperone, ABC1 activity of bc1 complex like (S. pombe) | | |
| CABLES1 | Cdk5 and Abl enzyme substrate 1 | CABL1, CABLES, HsT2563, IK3-1 | |
| CABLES2 | Cdk5 and Abl enzyme substrate 2 | RP5-908M14.2, C20orf150, dJ908M14.2, ik3-2 | |
| CABYR | Calcium binding tyrosine-(1)-phosphorylation regulated | CABYRac, CABYRca, CABYRc, CBF80, CBF8, FSP2, CABYB | |
| CACHD1 | Cache domain containing 1 | RP4-655E10.1 | |
| CACNA1B | Calcium channel, voltage-dependent, N type, | BIII, CACNL1A5, CACNN, Cav2.2 | |
| CACNA1C | Calcium channel, voltage-dependent, L type, | CACNL2, CACN2, CACNL1A1, CCHL1A1, Cav1.2, | |
| CACNA1E | Calcium channel, voltage-dependent, K type, | LOT8, TS | |
| CACNA2D2 | Calcium channel, voltage-dependent, alpha | BII, CACH6, CACNL1A6, Cav2.3 | |
| CACNA2D3 | Calcium channel, voltage-dependent, alpha | CACNA2D | |
| CACNA2D4 | Calcium channel, voltage-dependent, alpha | HSA272268 | |
| CACNB2 | Calcium channel, voltage-dependent, beta 2 | RCD4 | |
| CACNB4 | Calcium channel, voltage-dependent, beta 4 | RP11-383B4.2, CACNLB2, CAVB2, MYSB | |
| CACYBP | Calcyclin binding protein | RP23-435G20.4, 3110038O15Rik, Cchb4, lh | |
| | | PNAS-107, GIG5, S100A6BP, SIP | |

| | | | |
|-----------|---|---|---|
| CADM1 | Cell adhesion molecule 1 | BEZ, IGSP4, IGSP4A, NECL2, Necl-2, RAI75, ST17, SYNCAM, TSLC1, TSLC1, IGSE, synCAM1 | |
| CADM2 | Cell adhesion molecule 2 | IGSF4D, NECL3, Necl-3, SynCAM 2, synCAM2 | |
| CADM3 | Cell adhesion molecule 3 | CTA-154 ZZ.1, DIGK, IGSP4D, NECL1, Necl-1, TSL1, synCAM2 | |
| CADPS2 | Ca ⁺⁺ -dependent secretion activator 2 | | |
| CALB1 | Calbindin 1, 28 kDa | CALB | |
| CALCA | Calcitonin-related polypeptide alpha | CALC1, CGRP, CGRP-I, CGRP1, CT, KC | |
| CALCB | Calcitonin-related polypeptide beta | CALC2, CGRP-II, CGRP2 | |
| CALCR | Calcitonin receptor | CRT, CT-R, CTR, CTR1 | |
| CALCRL | Calcitonin receptor-like | CGRPR, CRLR | |
| CALD1 | Caldesmon 1 | CDM, H-CAD, HCAD, L-CAD, LCAD, NAG22 | |
| CALM1 | Calmodulin 1 (phosphorylase kinase, delta) | CALML2, CAMI, CPVT4, DD132, PHKD, caM | |
| CALM2 | Calmodulin 2 (phosphorylase kinase, delta) | CAMII, PHKD, PHKD2 | |
| CALM3 | Calmodulin 3 (phosphorylase kinase, delta) | HEL-S-72, PHKD, PHKD3 | |
| CALN1 | Calneuron 1 | CABP8 | |
| CALR | Calreticulin | CRT, HEL-S-99n, RO, SSA, cC1qR | v |
| CALU | Calumenin | | |
| CAMK2D | Calcium/calmodulin-dependent protein kinase II delta | CAMKD | |
| CAMK2G | Calcium/calmodulin-dependent protein kinase II gamma | RP11-574K11.6, CAMK, CAMK-II, CAMKG | |
| CAMK2N1 | Calcium/calmodulin-dependent protein kinase II nuclear 1 | RP11-401M16.1, PRO1489 | |
| CAMKK1 | Calcium/calmodulin-dependent protein kinase kinase I | CAMKKA | |
| CAMSAP1 | Calmodulin-regulated spectrin-associated protein 1 | RP11-100C15.2, PRO2405, bA100C15.1 | |
| CAMSAP1L1 | Calmodulin-regulated spectrin-associated protein 1-like 1 | | |
| CAMTA1 | Calmodulin binding transcription activator 1 | RP3-467L1.1, CANPMR | v |
| CAMTA2 | Calmodulin binding transcription activator 2 | | |
| CAND1 | Calcium-associated and neddylation-associated 1 | TIP120, TIP120A | |
| CANT1 | Calcium activated nucleotidase 1 | DBQD, SCAN-1, SCAN1, SHAPY | v |
| CANX | Calnexin | CNX, IP90, P90 | |
| CAP1 | CAP, adenylate cyclase-associated protein 1 (cap1) | RP11-115D7.1, CAP-PEN, CAP1 | |
| CAPRIN1 | Cell cycle associated protein 1 | GPIAP1, GPIP137, GRIP137, M11S1, RNG105, p137GPI | |
| CAPRIN2 | Caprin family member 2 | C1QDC1, EEG-1, EEG1, RNG140 | |
| CAPS2 | Calcyphosine 2 | UG0636c06 | |
| CAPZA1 | Capping protein (actin filament) muscle Z-disc alpha 1 | CAPPA1, CAPZ, CAZ1 | |
| CAPZA2 | Capping protein (actin filament) muscle Z-disc alpha 2 | CAPPA2, CAPZ | |

| | | | |
|----------|---|---|---|
| CARD10 | Caspase recruitment domain family, member 10 | RP5-889J22__B.2, BIMP1, CARMA3 | |
| CARD11 | Caspase recruitment domain family, member 11 | BENTA, BIMP3, CARMA1, IMD11, PPBL | √ |
| CARD14 | Caspase recruitment domain family, member 14 | BIMP2, CARMA2, PRP, PSORS2, PSS1 | |
| CARD8 | Caspase recruitment domain family, member 8 | CARDINAL, DACAK, DAKAK, NDFF, NDFF1, TLGAM | |
| CARM1 | Coactivator-associated arginine | PRMT4 | |
| CASC2 | Cancer susceptibility candidate 2 (non-protein coding) | C10orf5 | |
| CASC3 | Cancer susceptibility candidate 3 | BTZ, MLN51 | |
| CASC4 | Cancer susceptibility candidate 4 | UNQ2573/PRO6308, H63 | |
| CASC5 | Cancer susceptibility candidate 5 | AT13Q14, C129, D40, KNL1, PTTTK33, Spc7, HKNF-1, KSN195 | |
| CASK | Calcium/calmodulin-dependent serine protein kinase (MACUK family) | KPT1-340L1.1, CAGH39, CAMGOK, CMG, FGS4, LIN2, MGRGL, MDYSNA, TNRC9 | |
| CASKIN1 | CASK interacting protein 1 | ANKS5A | |
| CASP1 | Caspase 1, apoptosis-related cysteine protease | ICE, IL1BC, P45 | |
| CASP10 | Caspase 10, apoptosis-related cysteine protease | ALPS2, FLICE2, MCH4 | |
| CASP2 | Caspase 2, apoptosis-related cysteine protease | CASP-2, ICH1, NEDD-2, NEDD2, PPP1R57 | |
| CASP4 | Caspase 4, apoptosis-related cysteine protease | ICE(rel)II, ICEREL-II, ICH-2, Mih1/TX, TX | |
| CASP7 | Caspase 7, apoptosis-related cysteine protease | KPT1-211N1.0, CASP-7, CMIF-1, ICE-LAP3, LICE2, MCH2 | |
| CASP8 | Caspase 8, apoptosis-related cysteine protease | ALPS2B, CAP4, Casp-8, FLICE, MACH, MCH5 | √ |
| CASQ2 | Calsequestrin 2 (cardiac muscle) | PDIB2 | |
| CASR | Calcium-sensing receptor | CAR, EIG8, FHH, FHH, GPRC2A, HHC, HHC1, HYPOG1, NSHPT, PCAR1 | |
| CAST | Calpastatin | BS-17 | |
| CAT | Catalase | | |
| CATSPER2 | Cation channel, sperm associated 2 | | |
| CAV1 | Caveolin 1, caveolae protein, 22 kDa | BSCL3, CGL3, LCCNS, MSTP085, PPH3, VIP21 | |
| CAV2 | Caveolin 2 | CAV | |
| CBFA2T2 | Core-binding factor, runt domain, alpha 2 | RP5-1137F22.1, EHT, MTGR1, ZMYND3, p85 | |
| CBFA2T3 | Core-binding factor, runt domain, alpha 3 | ETO2, MTG16, MTGR2, ZMYND4 | √ |
| CBL | Cbl proto-oncogene, E3 ubiquitin protein ligase | C-CBL2, FRA11B, NSLL, RNF55, CBL | √ |
| CBLB | Cbl proto-oncogene B, E3 ubiquitin protein ligase | Nbla00127, Cbl-b, RNF56 | √ |
| CBLL1 | Cbl proto-oncogene-like 1, E3 ubiquitin protein ligase | HAKAI, RNF188 | |
| CBLN2 | Cerebellin 2 precursor | UNQ1892/PRO4338 | |
| CBR1 | Carbonyl reductase 1 | CBR, SDR21C1, hCBR1 | |
| CBR4 | Carbonyl reductase 4 | SDR45C1 | |
| CBWD1 | COBW domain containing 1 | RP11-143M1.6, COBP | |

| | | | |
|-----------|---|--|--|
| CBWD2 | COBW domain containing 2 | | |
| CBWD3 | COBW domain containing 3 | RP11-561O23.4, bA561O23.1 | |
| CBWD5 | COBW domain containing 5 | RP11-460E7.3, DC36 | |
| CBWD6 | COBW domain containing 6 | BX255923.2 | |
| CBX4 | Chromobox homolog 4 | NBP16, PC2 | |
| CBX5 | Chromobox homolog 5 | HEL25, HP1, HP1A | |
| CBX7 | Chromobox homolog 7 | RP4-742C19.7 | |
| CBY1 | Chibby homolog 1 (Drosophila) | RP3-508H5.8, CZZ0H2, CB1, HS508H5A, FGEA1, DICEA14, DICEA14-ash1 | |
| CC2D2A | Coiled-coil and C2 domain containing 2A | JBTS9, MKS6 | |
| CC2D2B | Coiled-coil and C2 domain containing 2B | RP11-248J23.4, C10orf130, bA248J23.4 | |
| CCAR1 | Cell division cycle and apoptosis regulator 1 | RP11-437A18.1 | |
| CCBL1 | Cysteine conjugate-beta lyase, cytoplasmic | RP11-545E17.6, GTK, KAT1, KATI | |
| CCBP2 | | | |
| CCDC102A | Coiled-coil domain containing 102A | | |
| CCDC102B | Coiled-coil domain containing 102B | ACY1L, AN, C18orf14, HsT1731 | |
| CCDC103 | Coiled-coil domain containing 103 | CILD17, PR46b, SMH | |
| CCDC108 | Coiled-coil domain containing 108 | | |
| CCDC109A | | | |
| CCDC110 | Coiled-coil domain containing 110 | CT52, KM-HN-1, KMHN1 | |
| CCDC112 | Coiled-coil domain containing 112 | MBC1 | |
| CCDC113 | Coiled-coil domain containing 113 | HSPC065 | |
| CCDC117 | Coiled-coil domain containing 117 | CTA-292E10.4, dJ366L4.1 | |
| CCDC122 | Coiled-coil domain containing 122 | RP11-5G9.1 | |
| CCDC125 | Coiled-coil domain containing 125 | KENAE | |
| CCDC126 | Coiled-coil domain containing 126 | 6330407D12Rik, AA675040, AI465320, AL022711 | |
| CCDC132 | Coiled-coil domain containing 132 | | |
| CCDC14 | Coiled-coil domain containing 14 | | |
| CCDC141 | Coiled-coil domain containing 141 | CAMDI | |
| CCDC144A | Coiled-coil domain containing 144A | | |
| CCDC144B | Coiled-coil domain containing 144B | | |
| CCDC144NL | Coiled-coil domain containing 144 family, non-terminal like | | |
| CCDC148 | Coiled-coil domain containing 148 | | |
| CCDC149 | Coiled-coil domain containing 149 | | |

| | | | |
|---------|-----------------------------------|---|---|
| CCDC15 | Coiled-coil domain containing 15 | | |
| CCDC150 | Coiled-coil domain containing 150 | | |
| CCDC152 | Coiled-coil domain containing 152 | Chr5_400, CH5400 | |
| CCDC155 | Coiled-coil domain containing 155 | KASH5 | |
| CCDC17 | Coiled-coil domain containing 17 | RP4-697E16.4 | |
| CCDC25 | Coiled-coil domain containing 25 | | |
| CCDC34 | Coiled-coil domain containing 34 | L15, NY-REN-41, RAMA3 | |
| CCDC36 | coiled-coil domain containing 36 | CT74 | |
| CCDC41 | | | |
| CCDC42 | Coiled-coil domain containing 42 | CCDC42A | |
| CCDC45 | | | |
| CCDC50 | Coiled-coil domain containing 50 | C3orf6, DFNA44, YMER | |
| CCDC51 | Coiled-coil domain containing 51 | | |
| CCDC52 | | | |
| CCDC6 | Coiled-coil domain containing 6 | D10S170, H4, PTC, TPC, TST1 | v |
| CCDC60 | Coiled-coil domain containing 60 | | |
| CCDC62 | Coiled-coil domain containing 62 | CT109, ERAP75, TSP-NY | |
| CCDC64 | Coiled-coil domain containing 64 | BICDR-1, H_267D11.1 | |
| CCDC66 | Coiled-coil domain containing 66 | | |
| CCDC67 | Coiled-coil domain containing 67 | | |
| CCDC68 | Coiled-coil domain containing 68 | SE57-1 | |
| CCDC7 | Coiled-coil domain containing 7 | RP11-195O1.4, BioT2-A, BioT2-B, BioT2-C, C10orf68 | |
| CCDC73 | Coiled-coil domain containing 73 | NY-SAR-79 | v |
| CCDC75 | | | |
| CCDC85A | Coiled-coil domain containing 85A | | |
| CCDC88A | Coiled-coil domain containing 88A | APE, GIRDIN, GIV, GRDN, HkRP1, KIAA1212 | |
| CCDC88C | Coiled-coil domain containing 88C | DAPLE, HKRP2, KIAA1509, SCA40 | |
| CCDC9 | Coiled-coil domain containing 9 | | |
| CCDC91 | Coiled-coil domain containing 91 | HSD8, p56 | |
| CCDC92 | Coiled-coil domain containing 92 | | |
| CCDC93 | Coiled-coil domain containing 93 | | |
| CCDC99 | | | |
| CCKBR | Cholecystokinin B receptor | CCK-B, CCK2R, GASR | |

| | | | |
|---------|--|---|---|
| CCL13 | Chemokine (C-C motif) ligand 13 | CKb10, MCP-4, NCC-1, NCC1, SCYA13, SCYL1 | |
| CCL22 | Chemokine (C-C motif) ligand 22 | A-152E5.1, ABCD-1, DC/D-CK, MDC, SCYA22, STCF-1 | |
| CCL25 | Chemokine (C-C motif) ligand 25 | Ckb15, SCYA25, TECK | |
| CCL8 | Chemokine (C-C motif) ligand 8 | HC14, MCP-2, MCP2, SCYA10, SCYA8 | |
| CCNB1 | Cyclin B1 | CCNB | |
| CCNDBP1 | Cyclin D-type binding-protein 1 | DIP1, GCIP, HHM | |
| CCNE1 | Cyclin E1 | CCNE | v |
| CCNF | Cyclin F | FBX1, FBXO1 | |
| CCNG1 | Cyclin G1 | CCNG | |
| CCNG2 | Cyclin G2 | | |
| CCNH | Cyclin H | CAK, CycH, p34, p37 | |
| CCNI2 | Cyclin I family, member 2 | | |
| CCNJ | Cyclin J | bA690P14.1 | |
| CCNK | Cyclin K | CPR4 | |
| CCNL2 | Cyclin L2 | NP4-758J18.1, ANIA-0B, CCNM, CCNS, HCLA-150, HLA-150, BCEF, SB128 | |
| CCNT2 | Cyclin T2 | CYCT2 | |
| CCR1 | Chemokine (C-C motif) receptor 1 | CD191, CCR-1, CCR1, CMKBR1, HM145, MIP1aX, SCYAP1 | |
| CCR2 | Chemokine (C-C motif) receptor 2 | CC-CCR-2, CCR-2A, CCR2B, CD192, CCR2, CCR2A, CCR2B, CMKBR2, MCP-1R, CCR2 | |
| CCR3 | Chemokine (C-C motif) receptor 3 | CC-CCR-3, CD193, CKR3, CMKBR3 | |
| CCR6 | Chemokine (C-C motif) receptor 6 | CC-CCR-6, CC-CCR-6, CCR-6, CD196, CCR-6, CCR6, CCR6, CMKBR6, DCR2, DRV6, CCR6 | |
| CCRN4L | CCR4 carbon catabolite repression 4-like (c) | CCR4L, Ccr4c, NOC | |
| CCT5 | Cnaperonin containing TCP1, subunit 5 (cnapin) | CCT-epsilon, CTE, HEL-S-69, TCP-1-epsilon | |
| CCT6P1 | Cnaperonin containing TCP1, subunit 6 (cnapin) | CCT6-5P, CCT6AP1 | |
| CCT6P3 | Cnaperonin containing TCP1, subunit 6 (cnapin) | | |
| CCT8L2 | Cnaperonin containing TCP1, subunit 8 (cnapin) | CESK1 | |
| CD101 | CD101 molecule | RP11-27K13.2, EWI-101, IGSF2, V7 | |
| CD109 | CD109 molecule | RP11-525G3.1, CPAMD7, p180, r150 | |
| CD160 | CD160 molecule | RP11-373C9.1, BY55, NK1, NK28 | |
| CD163 | CD163 molecule | M130, MM130 | |
| CD1C | CD1c molecule | RP11-101J8.3, BDCA1, CD1, CD1A, R7 | |
| CD1D | CD1d molecule | CD1A, R3 | |
| CD1E | CD1e molecule | RP11-101J8.5, CD1A, R2 | |
| CD2 | CD2 molecule | RP4-655N15.2, LFA-2, SRBC, T11 | |

| | | | |
|---------|--|---|---|
| CD200R1 | CD200 receptor 1 | UNQ2522/PRO0015, CD200R, HCKTR2, MOX2R, OX2R | |
| CD24 | CD24 molecule | CD24A | |
| CD247 | CD247 molecule | RP11-104E21.1, CD3-ZETA, CD3H, CD3Q, CD3Z, IMD35, T27, TCRZ | |
| CD274 | CD274 molecule | B7-H, B7H1, PD-L1, PDCD1L1, PDCD1LG1, PDL1 | v |
| CD28 | CD28 molecule | Tp44 | |
| CD2AP | CD2-associated protein | CMS | |
| CD300LB | CD300 molecule-like family member b | UNQ2550/PRO0029, CD300B, CLM-7, CLM7, CMK155-A2, IDEM 2, IDEM2, TREM 5, TREM5 | |
| CD302 | CD302 molecule | BIMLEC, CLEC13A, DCL-1, DCL1 | |
| CD33 | CD33 molecule | SIGLEC-3, SIGLEC3, p67 | |
| CD4 | CD4 molecule | CD4mut | |
| CD44 | CD44 molecule (Indian blood group) | AL15550.1, CDW44, CSTG6, ECMK-III, HCELL, HUTCH1, INLUB, MC56, MDU2, MDU2, MICA, P-1 | |
| CD46 | CD46 molecule, complement regulatory protein | AHUS2, MCP, MIC10, TLX, TRA2.10 | |
| CD47 | CD47 molecule | IAP, MER6, OA3 | |
| CD48 | CD48 molecule | RP11-704F10.5, DCMT, DEAST, DEAST1, MEM-102, SLAMF2, L-CD48, CD48 | |
| CD55 | CD55 molecule, decay accelerating factor for complement (C3 and C5 convertase) | RP11-357P18.1, CR, CROM, DAF, TC | |
| CD59 | CD59 molecule, complement regulatory protein | 10.5A5, IF5, L510, L550, L552, G544, HKF-20, HKF20, MAQ1B, MAQ2E, MEM43, MIC11, MN11, MN21, MN2 | |
| CD5L | CD5 molecule-like | UNQ205/PRO225, MEM43, AL10, PRO229, SP-ALPHA, Sp-Alpha | |
| CD6 | CD6 molecule | TP120 | |
| CD69 | CD69 molecule | AIM, BL-AC/P26, CLEC2C, EA1, GP32/28, MLR-3 | |
| CD84 | CD84 molecule | LY9B, SLAMF5, hCD84, mCD84 | |
| CD93 | CD93 molecule | CTQT1, CTQT1(F), CTQT1, CDW93, ECSM5, MAXA4, H727E22.1 | |
| CD96 | CD96 molecule | TACTILE | |
| CD99L2 | CD99 molecule-like 2 | UNQ1964/PRO4486, CD99B, MIC2L1 | |
| CDADC1 | Cytidine and dCMP deaminase domain containing 1 | RP11-103J18.2, NYD-SP15, bA103J18.1 | |
| CDC123 | Cell division cycle 123 | RP11-186N15.4, C10orf7, D123 | |
| CDC14A | Cell division cycle 14A | cdc14, hCDC14 | |
| CDC14B | Cell division cycle 14B | RP11-172F4.15, Cdc14B1, Cdc14B2, hCDC14B, CDC14B | |
| CDC16 | Cell division cycle 16 | RP11-569D9.4, ANAPC6, APC6, CUT9 | |
| CDC20B | Cell division cycle 20B | G6VTS76519 | |
| CDC23 | Cell division cycle 23 | ANAPC8, APC8, CUT23 | |
| CDC25A | Cell division cycle 25A | CDC25A2 | |
| CDC26 | Cell division cycle 26 | ANAPC12, APC12, C9orf17 | |
| CDC27 | Cell division cycle 27 | ANAPC3, APC3H, DOST450E, DT15978E, IFNUC, UNIC, NUIC, CDC27 | |

| | | | |
|----------|--|---|---|
| CDC40 | Cell division cycle 40 | RP1-71D21.3, EHB3, PRP17, PRPF17 | |
| CDC42 | Cell division cycle 42 | RP1-224A6.5Hs, G25K, CDC42 | |
| CDC42BPA | CDC42 binding protein kinase alpha (DM1K-111) | RP5-1087E8.4, MRCK, MRCKA | |
| CDC42BPB | CDC42 binding protein kinase beta (DM1K-111) | MRCKB | |
| CDC42SE1 | CDC42 small effector 1 | SCIP1, SPEC1 | |
| CDC42SE2 | CDC42 small effector 2 | SPEC2 | |
| CDC45 | Cell division cycle 45 | UNQ374/PRO710L, CDC45L2, PORC-PI-1, CDC45 | |
| CDC6 | Cell division cycle 6 | CDC18L, HsCDC18, HsCDC6 | |
| CDC73 | Cell division cycle 73 | C1orf28, FIHP, HPTJT, HRPT1, HRPT2, HYX | |
| CDCA4 | Cell division cycle associated 4 | HEPP, SEI-3/HEPP | |
| CDCA5 | Cell division cycle associated 5 | SORORIN | |
| CDCP1 | CUB domain containing protein 1 | UNQ2486/PRO5773, CD318, SIMA135, TRASK | |
| CDH1 | Cadherin 1, type 1, E-cadherin (epithelial) | Arc-1, CD324, CDHE, ECAD, LCAM, UVO | v |
| CDH13 | Cadherin 13 | CDHH, P105 | |
| CDH17 | Cadherin 17, LI cadherin (liver-intestine) | CDH16, HPT-1, HPT1 | |
| CDH2 | Cadherin 2, type 1, N-cadherin (neuronal) | CD325, CDHN, CDw325, NCAD | |
| CDH23 | Cadherin-related 23 | RP11-472K8.4, CDHR23, USH1D | |
| CDH3 | Cadherin 3, type 1, P-cadherin (placental) | CDHP, HJMD, PCAD | |
| CDH7 | cadherin 7, type 2 | CDH7L1 | |
| CDH8 | Cadherin 2, type 1, N-cadherin (neuronal) | CD325, CDHN, CDw325, NCAD | |
| CDH9 | Cadherin 9, type 2 (T1-cadherin) | | |
| CDIPT | CD1-diacylglycerol--inositol 3-phosphatidyltransferase | PIS, PIS1 | |
| CDK1 | Cyclin-dependent kinase 1 | CDC2, CDC28A, P34CDC2 | |
| CDK10 | Cyclin-dependent kinase 10 | PISSLRE | |
| CDK14 | Cyclin-dependent kinase 14 | PFTAIRE1, PFTK1 | |
| CDK17 | Cyclin-dependent kinase 17 | PCTAIRE2, PCTK2 | |
| CDK19 | Cyclin-dependent kinase 19 | RP11-346C16.5, CDC2L6, CDK11, bA346C16.3 | |
| CDK2AP1 | Cyclin-dependent kinase 2 associated protein 1 | DOC1, DORC1, ST19, doc-1, p12DOC-1 | |
| CDK3 | Cyclin-dependent kinase 3 | | |
| CDK6 | Cyclin-dependent kinase 6 | PLSTIRE | v |
| CDK8 | Cyclin-dependent kinase 8 | K35 | |
| CDKL2 | Cyclin-dependent kinase-like 2 (CDC2-related kinase) | KKIAMRE, P56 | |
| CDKL3 | Cyclin-dependent kinase-like 3 | NKIAMRE | |

| | | | |
|------------|--|---|---|
| CDKN1B | Cyclin-dependent kinase inhibitor 1B (p27, <i>Kip1</i>) | CDKN4, KIP1, MEN1B, MEN4, P27KIP1 | |
| CDKN2AIP | CDKN2A interacting protein | CARF | |
| CDKN2AIPNL | CDKN2A interacting protein N-terminal like | | |
| CDKN2BAS | | | |
| CDKN2C | Cyclin-dependent kinase inhibitor 2C (p18, <i>INK4</i>) | RP11-278J17.2, INK4C, p18, p18-INK4C | √ |
| CDKN3 | Cyclin-dependent kinase inhibitor 3 | CDI1, CIP2, KAP, KAP1 | |
| CDON | Cell adhesion associated, oncogene regulated | CDO1, HPE11, ORCAM, CDON | |
| CDR2 | Cerebellar degeneration-related protein 2, <i>oz</i> | CDR62, Yo | |
| CDR2L | Cerebellar degeneration-related protein 2-like | HUMPPA | |
| CDRT4 | CMT1A duplicated region transcript 4 | | |
| CDS1 | CDP-diacylglycerol synthase (phosphatidate | CDS | |
| CDS2 | CDP-diacylglycerol synthase (phosphatidate | RP4-680N4.2 | |
| CDV3 | | | |
| CDX2 | Caudal type homeobox 2 | CDX-3/AS, CDX3, CDX2 | √ |
| CDY1 | Chromodomain protein, Y-linked, 1 | CDYA, CDY1 | |
| CDYL | Chromodomain protein, Y-like | CDYL1 | |
| CEACAM1 | Carcinoembryonic antigen-related cell | BGP, BGP1, BGPI | |
| CEACAM21 | Carcinoembryonic antigen-related cell | UNQ3098/PRO10075, CEACAM3, R29124_1 | |
| CEACAM3 | Carcinoembryonic antigen-related cell | CD66D, CEA, CGM1, W264, W282 | |
| CEACAM5 | Carcinoembryonic antigen-related cell | CD66e, CEA | |
| CEBPA | CCAAT/enhancer binding protein (C/EBP), | C/EBP-alpha, CEBP | √ |
| CEBPG | CCAAT/enhancer binding protein (C/EBP), | GPE1BP, IG/EBP-1 | |
| CECR1 | Cat eye syndrome chromosome region, | ADA2, ADGF, IDGFL, PAN, SNEDS | |
| CECR2 | Cat eye syndrome chromosome region, | | |
| CECR4 | Cat eye syndrome chromosome region, | | |
| CECR6 | Cat eye syndrome chromosome region, | | |
| CECR7 | Cat eye syndrome chromosome region, | SAHL1 | |
| CELF1 | CUGBP, Elav-like family member 1 | BRUNOL2, CUG-BP, CUGBP, CUGBP1, EDEN-BP, NAPI59, NAPI2, BRUNOL3, CUGBP2, ETR-3, ETR3, NAPI3 | |
| CELF2 | CUGBP, Elav-like family member 2 | | |
| CELSR3 | Cadherin, EGF-LAG seven-pass G-type | CDHF11, EGFL1, FMI1, HFMI1, MEGF2, RESDA1 | |
| CENPC1 | | | |
| CENPE | Centromere protein E, 312 kDa | CENP-E, KIF10, PPP1R61 | |
| CENPI | Centromere protein I | RP5-1188J21.1, CENP-I, FSHPRH1, LRPR1, Mis6 | |

| | | | |
|--------|---|---|---|
| CENPV | Centromere protein V | 3110013H01Rik, CENP-V, PRR6, p30 | |
| CENPW | Centromere protein W | C6orf173, CENP-W, CUG2 | |
| CEP110 | | | |
| CEP120 | Centrosomal protein 120 kDa | CCDC100 | |
| CEP135 | Centrosomal protein 135 kDa | CEP4, KIAA0635, MCPH8 | |
| CEP192 | Centrosomal protein 192 kDa | PP8407, PPP1R62 | |
| CEP350 | Centrosomal protein 350 kDa | RP11-502H18.1, CAP350, GM133 | |
| CEP55 | Centrosomal protein 55 kDa | RP11-30E16.2, C10orf3, CT111, URCC6 | |
| CEP57 | Centrosomal protein 57 kDa | MVA2, PIG8, TSP57 | |
| CEP63 | Centrosomal protein 63 kDa | SCKL6 | |
| CEP68 | Centrosomal protein 68 kDa | KIAA0582 | |
| CEP72 | Centrosomal protein 72 kDa | | |
| CEP78 | Centrosomal protein 78 kDa | RP11-336N8.5, C9orf81, IP63 | |
| CEPT1 | Choline/ethanolamine phosphotransferase 1 | PRO1101 | |
| CER1 | Cerberus 1, DAN family BMP antagonist | DAND4 | |
| CES2 | Carboxylesterase 2 | CE-2A1, PCE-2, iCE, CES2 | |
| CES7 | | | |
| CETN3 | Centrin, EF-hand protein, 3 | CDC31, CEN3 | |
| CFL1 | Cofilin 1 (non-muscle) | CFL, HEL-S-15 | |
| CFL2 | Cofilin 2 (muscle) | NEM7 | |
| CFLAR | CASP8 and FADD-like apoptosis regulator | CASP8, CASP8A1, CLARP, Caspel, FLAME, FLAME-1, FLAME1, FLIP, FLICE, MDR1, FLIP, FLIP2 | |
| CFLP1 | Cofilin 1 (non-muscle) pseudogene 1 | | |
| CFP | Complement factor properdin | BFD, PFC, PFD, PROPERDIN | |
| CGGBP1 | CGG triplet repeat binding protein 1 | CGGBP, p20-CGGBP | |
| CGN | Cingulin | RP11-74C1.3 | |
| CGNL1 | Cingulin-like 1 | JACOP | |
| CGRRF1 | Cell growth regulator with ring finger domain 1 | CGR19, RNF197 | |
| CH25H | Cholesterol 25-hydroxylase | C25H | |
| CHAT | Choline O-acetyltransferase | CHOACTASE, CMS1A, CMS1A2 | |
| CHCHD1 | Coiled-coil-helix-coiled-coil-helix domain containing 1 | C10orf34, C2360, MRP-S37 | |
| CHCHD5 | Coiled-coil-helix-coiled-coil-helix domain containing 5 | C2orf9, MIC14 | |
| CHCHD7 | Coiled-coil-helix-coiled-coil-helix domain containing 7 | COX23 | v |
| CHCHD8 | | | |

| | | | |
|---------|---|---|---|
| CHD1 | Chromodomain helicase DNA binding | | |
| CHD2 | Chromodomain helicase DNA binding | EEOC | |
| CHD3 | Chromodomain helicase DNA binding | Mi-2a, Mi2-ALPHA, ZFH | |
| CHD5 | Chromodomain helicase DNA binding | RP1-233K16.2, CHD-5 | |
| CHD6 | Chromodomain helicase DNA binding | RP4-620E11.2, CHD-6, CHD5, RIGB | |
| CHD7 | Chromodomain helicase DNA binding | CRG, HH5, IS3, KAL5 | |
| CHD9 | Chromodomain helicase DNA binding | AD-013, AD013, CReMM, KISH2, PRIC320 | |
| CHERP | Calcium homeostasis endoplasmic reticulum | DAN16, SCAF6, SRA1 | |
| CHGA | Chromogranin A (paraneuronal secretory protein 1) | CGA | |
| CHIC1 | Cysteine-rich hydrophobic domain 1 | RP11-108A15.1, BRX | |
| CHKA | Choline kinase alpha | CHK, CK, CKI, EK | |
| CHL1 | Cell adhesion molecule L1-like | CALL, L1CAM2 | |
| CHM | Choroideremia (Rab escort protein 1) | RP1-93L7.1, DXS540, GGTA, HSD-32, REP-1, TCD | |
| CHML | Choroideremia-like (Rab escort protein 2) | REP2 | |
| CHMP1B | Charged multivesicular body protein 1B | C16orf12, C16-ORF2, C16orf12, CHMP1.5, vps40-2, Vps46B, Vps46.2 | |
| CHMP2B | Charged multivesicular body protein 2B | CGI-84, ALS17, CHMP2.5, DMT1, VPS2-2, VPS2B | |
| CHMP4C | Charged multivesicular body protein 4C | SNF7-3, Shax3, VPS32C | |
| CHMP7 | Charged multivesicular body protein 7 | | |
| CHN1 | Chimerin 1 | ARHGAP2, CHN, DURS2, NC, RHOGAP2 | v |
| CHN2 | Chimerin 2 | tcag7.1311, ARHGAP3, BCH-3, RHOGAP3, CHN2 | |
| CHORDC1 | Cysteine and histidine-rich domain (CHORD) containing 1 | CHP1 | |
| CHP | | | |
| CHPT1 | Choline phosphotransferase 1 | MSTP022, CPT, CPT1 | |
| CHRDL1 | Chordin-like 1 | RP6-141H5.1, CHL, MOC1, MOCN, NIKEN1, VOP1, LA141H5.1 | |
| CHRM2 | Cholinergic receptor, muscarinic 2 | HM2 | |
| CHRM5 | Cholinergic receptor, muscarinic 5 | HM5 | |
| CHRNA1 | Cholinergic receptor, nicotinic, alpha 1 | ACHRA, ACHRD, CHRNA, CMS2A, FCCMS, SCCMS | |
| CHRNA3 | Cholinergic receptor, nicotinic, alpha 3 | LNCR2, NACHRA3, PAOD2 | |
| CHRNA7 | Cholinergic receptor, nicotinic, alpha 7 | CHRNA7-2, NACHRA7 | |
| CHRNA9 | Cholinergic receptor, nicotinic, alpha 9 | HSA243342, NACHRA9 | |
| CHRNB2 | Cholinergic receptor, nicotinic, beta 2 | RP11-61L14.4, EFNL3, nAChRB2 | |
| CHRNE | Cholinergic receptor, nicotinic, epsilon | ACHRE, CMS1D, CMS1E, CMS2A, FCCMS, SCCMS | |
| CHST11 | Carbohydrate (chondroitin 4-) sulfotransferase 11 | C4ST, C4ST-1, C4ST1, HSA269537 | |

| | | | |
|--------|--|---|--|
| CHST3 | Carbohydrate (chondroitin 6-) | C6ST, C6ST1, HSD | |
| CHST6 | Carbohydrate (N2-acetylglucosamine 6-O) | MCDC1 | |
| CHST9 | Carbohydrate (N6-acetylglucosamine 4-O) sulfotransferase 9 | UNQ2549/PRO6175, GALNAC4ST-2 | |
| CHSY3 | Chondroitin sulfate synthase 3 | CHSY2, CSS3 | |
| CTF8 | CTF8, chromosome transmission fidelity factor 8 homolog (S. pombe) | CTF8, DERP | |
| CHURC1 | Churchill domain containing 1 | My015, C14orf52, chch | |
| CIAO1 | Cytosolic iron-sulfur assembly component 1 | CIA1, WDR39 | |
| CIDEA | Cell death-inducing DFFA-like effector a | CIDE-A | |
| CIRBP | Cold inducible RNA binding protein | CIRP | |
| CIRH1A | Cirrhosis, autosomal recessive 1A (cirhin) | CIRHIN, NAIC, TEX292, UTP4 | |
| CISD1 | CDGSH iron sulfur domain 1 | MDS029, C10orf70, ZCD1, mitoNEET | |
| CISH | Cytokine inducible SH2-containing protein | BACTS2, CIS, CIS-1, G18, SOCS | |
| CIT | Citronin-interacting serine/threonine | CRIK, STK21 | |
| CITED2 | Copp3500-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain 2 | ASD8, MRG-1, MRG1, P35SRJ, VSD2 | |
| CKAP2 | Cytoskeleton associated protein 2 | LB1, TMAP, se20-10 | |
| CKAP4 | Cytoskeleton associated protein 4 | CLIMP-63, ERGIC-63, p63 | |
| CKLF | Chemokine-like factor | HSPC224, CS21, CKLF2, CKLF3, CKLF4, CCK-1, CKLF | |
| CKMT1B | Creatine kinase, mitochondrial 1B | CKMT, CKMT1, UMTCK | |
| CKS1B | CDC28 protein kinase regulatory subunit 1B | RP11-307C12.6, CKS1, PNAS-16, PNAS-18, ckshs1 | |
| CLASP1 | Cytoplasmic linker associated protein 1 | MAST1 | |
| CLASP2 | Cytoplasmic linker associated protein 2 | | |
| CLCA3P | Chloride channel accessory 3, pseudogene | CLCA3 | |
| CLCC1 | Chloride channel CLIC-like 1 | RP11-475E11.6, MCLC | |
| CLCN2 | Chloride channel, voltage-sensitive 2 | CLC-2, CLC2, ECA2, ECA3, EGIT1, EGIS, EOMA, FIM6, FIM8, LKBPAT, JG2 | |
| CLCN4 | Chloride channel, voltage-sensitive 4 | CLC4, CLC-4, CLC-4A | |
| CLCN5 | Chloride channel, voltage-sensitive 5 | CLC5, CLCK2, CLC-5, DENT5, NFHL1, NFHL2, ALNH, XPN, hCLC K2 | |
| CLCN6 | Chloride channel, voltage-sensitive 6 | RP5-934G17.1, CLC-6 | |
| CLDN10 | Claudin 10 | RP11-23E3.4, CPETRL3, OSP-L | |
| CLDN12 | Claudin 12 | | |
| CLDN18 | Claudin 18 | UNQ778/PRO1572, SFTA5, SFTPJ | |
| CLDN19 | Claudin 19 | HOMG5 | |
| CLDN20 | Claudin 20 | | |
| CLDN4 | Caudin 4 | CPE-R, CPER, CPETR, CPETR1, WBSR8, hCPE-R | |

| | | | |
|---------|---|--|---|
| CLDN8 | Caudin 8 | UNQ779/PRO1573 | |
| CLDND1 | Claudin domain containing 1 | HSPC174, C3orf4, GENX-3745 | |
| CLEC12A | C-type lectin domain family 12, member A | CLL-1, CLL1, DCAL-2, M1CL | |
| CLEC16A | C-type lectin domain family 16, member A | Gop-1, KIAA0350 | |
| CLEC17A | C-type lectin domain family 17, member A | | |
| CLEC18B | C-type lectin domain family 18, member B | UNQ306/PRO347, MRCL2 | |
| CLEC1B | C-type lectin domain family 1, member B | UNQ721/PRO1384, T61000H15NIK, CLEC2, CLEC2B, PRO1284, QDEF721 | |
| CLEC2D | C-type lectin domain family 2, member D | CLAX, LLT1, OCIL | |
| CLEC3A | C-type lectin domain family 3, member A | UNQ700/PRO1345, CLECSF1 | |
| CLEC4D | C-type lectin domain family 4, member D | CLEC-6, CLEC6, CLECSF8, MCL, MPCL | |
| CLECL1 | C-type lectin-like 1 | DCAL-1, DCAL1 | |
| CLIC2 | Chloride intracellular channel 2 | RP13-228J13.7b, MRXS32, XAP121, CLIC2 | |
| CLIC6 | Chloride intracellular channel 6 | CLIC1L | |
| CLINT1 | Clathrin interactor 1 | CLINT, ENTH, EPN4, EPNR | |
| CLIP1 | CAR-GLT domain containing linker protein 1 | CLIP, CLIP-17070, CYLN1, RSN, CLIP1 | |
| CLK1 | CDC-like kinase 1 | CLK, CLK/STY, STY | |
| CLK4 | CDC-like kinase 4 | | |
| CLUU1 | Chronic lymphocytic leukemia up-regulated 1 | | |
| CLUU10S | Chronic lymphocytic leukemia up-regulated 1, opposite strand | | |
| CLMN | Calmin (calponin-like, transmembrane) | | |
| CLN8 | Ceroid lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation) | C8orf61, EPMR | |
| CLOCK | Clock circadian regulator | KAT13D, bHLHe8 | |
| CLRN10S | | | |
| CLSTN1 | Calsyntenin 1 | RP11-558F24.3, ALC-ALPHA, CDHR12, CSTN1, PK2CD, XP214446, 444444, 444444 | |
| CLSTN2 | Calsyntenin 2 | ALC-GAMMA, CDHR13, CS2, CSTN2, alcagamma | |
| CLTA | Clathrin, light chain A | LCA | |
| CLTC | Clathrin, heavy chain (Hc) | CHC, CHC17, CLH-17L2, Hc, CLTC | √ |
| CLUAP1 | Clusterin associated protein 1 | CFAP22, FAP22 | |
| CLUL1 | Clusterin-like 1 (retinal) | RA337M | |
| CLVS1 | Clavesin 1 | CRALBPL, RLBPL1 | |
| CMAH | | | |
| CMAS | Cytidine monophosphate N-acetylneuraminic acid synthase | CSS | |
| CMPK1 | Cytidine monophosphate (UMP-CMP) kinase 1, testis | RP11-511Z1.1, C1X, CMK, CMPK, UMPK, UMP-CMPK, UMPK | |

| | | | |
|---------|--|---|--|
| CMPK2 | Cytidine monophosphate (UMP-CMP) | TMPK2, TYKi, UMP-CMPK2 | |
| CMTM1 | CKLF-like motif 1 LL transmembrane protein | CKLFH, CKLFH1, CKLFSF1 | |
| CMTM4 | CKLF-like motif 4 LL transmembrane protein | CKLFSF4 | |
| CMTM6 | CKLF-like motif 6 LL transmembrane protein | CKLFSF6, PRO2219 | |
| CMTM8 | CKLF-like motif 8 LL transmembrane protein | CKLFSF8, CKLFSF8-V2 | |
| CNBP | Ccr4-type zinc finger, nucleic acid binding | CNBP1, DM2, PROMM, RNF163, ZCCHC22, ZNF9 | |
| CNDP1 | Carnosine dipeptidase 1 (metallopeptidase M10 family) | UNQ1915/PRO4380, CN1, CPGL2, HsT2308 | |
| CNGB1 | Cyclic nucleotide gated channel beta 1 | CNGB2, CNGB3L, CNGB4, CNGB5, GAK1, GAK1 , GAK2, RCNGB2, RCNGB3, RCNGB4, RCNGB5, PD45, CNGB1 | |
| CNIH3 | Connexin family A1M1 A receptor auxiliary protein 3 | RP11-3L21.1, CNIH-3 | |
| CNIH4 | Connexin family A1M1 A receptor auxiliary protein 4 | HSPC163, CNIH-4 | |
| CNKSR3 | CNKSR family member 3 | RP11-486M3.1, MAG11 | |
| CNNM1 | Cylin and CBS domain trivalent metal ion binding protein 1 | ACDP1, CLP-1 | |
| CNNM2 | Cylin and CBS domain trivalent metal ion binding protein 2 | RP11-30H12.1, ACDP2 | |
| CNNM3 | Cylin and CBS domain trivalent metal ion binding protein 3 | ACDP3 | |
| CNO | | | |
| CNOT1 | CCR4-NOT transcription complex, subunit 1 | AD-005, CDC39, NOT1, NOT1H | |
| CNOT10 | CCR4-NOT transcription complex, subunit 10 | | |
| CNOT2 | CCR4-NOT transcription complex, subunit 2 | HSPC131, CDC36, NOT2, NOT2H | |
| CNOT4 | CCR4-NOT transcription complex, subunit 4 | CLONE243, NOT4, NOT4H | |
| CNOT6 | CCR4-NOT transcription complex, subunit 6 | CCR4, Ccr4a | |
| CNOT6L | CCR4-NOT transcription complex, subunit 6-like | CCR4b | |
| CNOT8 | CCR4-NOT transcription complex, subunit 8 | CAF1, CALIF, Caf1b, POP2, hCAF1 | |
| CNP | 2',3'-cyclic nucleotide 3' phosphodiesterase | CNP1 | |
| CNPY1 | canopy FGF signaling regulator 1 | tcag7.570 | |
| CNR1 | Cannabinoid receptor 1 (brain) | RP11-25D17.1, CANN0, CB-R, CB1, CB1A, CB1B, CB1C, CB1D, CNR1 | |
| CNST | Consortin, connexin sorting protein | RP11-452J6.1, C1orf71, PPP1R64 | |
| CNTLN | Centlein, centrosomal protein | RP11-163F8.4, C9orf101, C9orf39, bA340N12.1 | |
| CNTN1 | Contactin 1 | F3, GP135, MYPCN | |
| CNTN2 | Contactin 2 (axonal) | AXT, FAME5, TAG-1, TAX, TAX1 | |
| CNTN3 | Contactin 3 (plasmacytoma associated) | BIG-1, PANG, PCS | |
| CNTN4 | Contactin 4 | AXCAM, BIG-2 | |
| CNTN5 | Contactin 5 | HNB-2s, NB-2 | |
| CNTNAP1 | Contactin associated protein 1 | CASPR, CNTNAP, NRXN4, P190 | |

| | | | |
|----------|--|---|--|
| CNTNAP2 | Contactin associated protein-like 2 | AUTS15, CASPR2, CDFE, NRXN4, PTHSL1 | |
| CNTNAP3 | Contactin associated protein-like 3 | RP11-138L21.1, CASPR3A, CNTNAP3 | |
| CNTNAP3B | Contactin associated protein-like 3B | AL353791.1 | |
| CNTNAP3B | Contactin associated protein-like 3B | AL353791.1 | |
| CNTNAP4 | Contactin associated protein-like 4 | CASPR4 | |
| COASY | CoA synthase | PSEC0106, DPCK, NBIA6, NBP, PPAT, UKR1, pOV-2 | |
| COBL | Cordon-bleu WH2 repeat protein | | |
| COG3 | Component of oligomeric golgi complex 3 | SEC34 | |
| COG5 | Component of oligomeric golgi complex 5 | CDG2I, GOLTC1, GTC90 | |
| COG6 | Component of oligomeric golgi complex 6 | RP11-304M3.3, CDG2L, COD2, SHNS | |
| COIL | Coilin | CLN80, p80-coilin | |
| COL10A1 | Collagen, type X, alpha 1 | RP1-136O14.2 | |
| COL16A1 | Collagen, type XVI, alpha 1 | FP1572, 447AA | |
| COL17A1 | Collagen, type XVII, alpha 1 | RP11-101H25.2, BAF10H25.2, BAF180, BFAF2, BFAO2, LAD1 | |
| COL19A1 | Collagen, type XIX, alpha 1 | RP1-138F4.1, COL9A1L, D6S228E | |
| COL1A2 | Collagen, type I, alpha 2 | OI4 | |
| COL21A1 | Collagen, type XXI, alpha 1 | FP633, COLA1L, dJ682J15.1, dJ708F5.1 | |
| COL22A1 | Collagen, type XXII, alpha 1 | | |
| COL29A1 | | | |
| COL3A1 | Collagen, type III, alpha 1 | EDS4A | |
| COL4A1 | Collagen, type IV, alpha 1 | RP11-472K17.2, HANAC, ICH, POREN1, arresten | |
| COL4A3BP | Collagen, type IV, alpha 3 (Goodpasture antigen) binding protein | CERT, CERTL, GPBP, STARD11 | |
| COL4A4 | Collagen, type IV, alpha 4 | CA44 | |
| COL4A5 | Collagen, type IV, alpha 5 | RP6-24A23.5, ASLN, ATS, CA54 | |
| COL5A1 | Collagen, type V, alpha 1 | RP11-263F14.1 | |
| COL5A2 | Collagen, type V, alpha 2 | | |
| COL6A3 | Collagen, type VI, alpha 3 | | |
| COL6A4P2 | Collagen, type VI, alpha 4 pseudogene 2 | COL6A4 | |
| COLQ | Collagen-like tail subunit (single strand or homotrimer) of asymmetric | EAD | |
| COMMD2 | COMM domain containing 2 | HSPC042 | |
| COMMD6 | COMM domain containing 6 | RP11-173B14.2, Acrg | |
| COMMD8 | COMM domain containing 8 | MDS022 | |
| COMT | Catechol-O-methyltransferase | HEL-S-98n | |

| | | | |
|---------|--|--------------------------------------|--|
| COPA | Coatomer protein complex, subunit alpha | HEP-COP | |
| COPS2 | COP9 signalosome subunit 2 | ALIEN, CSN2, SGN2, TRIP15 | |
| COQ10B | Coenzyme Q10 homolog B (<i>S. cerevisiae</i>) | | |
| COQ2 | Coenzyme Q2 4-hydroxybenzoate polymethyltransferase | CL640, COQ10D1, MSA1 | |
| COQ6 | Coenzyme Q6 monooxygenase | CGI-10, CGI10, COQ10D6 | |
| COQ7 | Coenzyme Q7 homolog, ubiquinone (yeast) | CAT5, CLK-1, CLK1 | |
| COQ9 | Coenzyme Q9 | HSPC326, C16orf49, COQ10D5 | |
| CORIN | Corin, serine peptidase | ATC2, CRN, Lrp4, PEE5, TMPRSS10 | |
| CORO1B | Coronin, actin binding protein, 1B | CORONIN-2 | |
| CORO1C | Coronin, actin binding protein, 1C | HCRNN4 | |
| COX10 | Cytochrome c oxidase assembly homolog 10 | | |
| COX11 | Cytochrome c oxidase assembly homolog 11 | COX11P | |
| COX15 | Cytochrome c oxidase assembly homolog 15 | CEMCOX2 | |
| COX17 | COX17 cytochrome c oxidase copper | | |
| COX19 | Cytochrome c oxidase assembly homolog 19 (<i>S. cerevisiae</i>) | | |
| COX4I1 | Cytochrome c oxidase subunit IV isoform 1 | COX4, COX4-1, COXIV | |
| COX4NB | | | |
| COX6B2 | Cytochrome c oxidase subunit v10 | COXVIB2, CT59 | |
| COX7A2L | Cytochrome c oxidase subunit v1a carboxypeptidase 2 like | COX7AR, COX7RP, EB1, SIG81 | |
| CP | Ceruloplasmin (ferroxidase) | CP-2 | |
| CP110 | | | |
| CPA2 | Carboxypeptidase A2 (pancreatic) | | |
| CPA6 | Carboxypeptidase A6 | CPAH, ETL5, FEB11 | |
| CPB2 | Carboxypeptidase B2 (plasma) | CPU, PCPB, TAFI | |
| CPD | Carboxypeptidase D | GP180 | |
| CPE | Carboxypeptidase E | | |
| CPEB1 | Cytosplasmic polyadenylation element | CEBP, CPE-BP1, CPEB, CPEB-1, hCPEB-1 | |
| CPEB2 | Cytosplasmic polyadenylation element | CPE-BP2, CPEB-2, hCPEB-2 | |
| CPEB4 | Cytosplasmic polyadenylation element binding protein 4 | | |
| CPLX2 | Complexin 2 | 921-L, CPX-2, CPX2, Hfb1 | |
| CPM | Carboxypeptidase M | | |
| CPNE2 | Copine II | COPN2, CPN2 | |
| CPNE4 | Copine IV | COPN4, CPN4 | |

| | | | |
|----------|---|---|---|
| CPOX | Coproporphyrinogen oxidase | CPO, CPX, HCP | |
| CPPED1 | Calcineurin-like phosphoesterase domain containing | CSTP1 | |
| CPSF6 | Cleavage and polyadenylation specific factor 6 (CPSF6) | CFIM, CFIM68, HPBR11-4, HPBR11-7 | |
| CPT1A | Carnitine palmitoyltransferase 1A (liver) | CPT1, CPT1-L, L-CPT1 | |
| CPT1B | Carnitine palmitoyltransferase 1B (muscle) | CPT1-M, CPT1M, CPT1, CPT1M, M-CPT1, MCCPT1, MCPT1 | |
| CRADD | CASP2 and K11/K1 domain containing | MRT34, RAIDD | |
| CRB1 | Crumbs family member 1; photoreceptor membrane associated | RP11-53124.1, LCA8, RP12 | |
| CREB1 | CAMP responsive element binding protein 1 | CREB | v |
| CREB3 | CAMP responsive element binding protein 3 | LUMAN, LZIP | |
| CREB3L2 | CAMP responsive element binding protein 3-like 2 | BBF2H7 | v |
| CREB5 | cAMP responsive element binding protein 5 | CRE-BPA | |
| CREBBP | CREB binding protein | CBP, KAT3A, RSTS | v |
| CREBL2 | CAMP responsive element binding protein-like 2 | | |
| CREBZF | CREB/ATF bZIP transcription factor | SMILE, ZF | |
| CREG2 | Cellular repressor of E1A-stimulated genes 2 | | |
| CREM | CAMP responsive element modulator | RP11-324122.1-2, ICER, hCREM-2, CREM | |
| CRH | Corticotropin releasing hormone | CRF | |
| CRHBP | Corticotropin releasing hormone binding | CRF-BP, CRFBP | |
| CRIM1 | Cysteine rich transmembrane BMP regulator 1 | UNQ1886/PRO4330, CRIM-1, S52 | |
| CRISPLD1 | Cysteine rich secretory protein LCCL | UNQ342/PRO541, CRISP-10, CRISP10, LCRISP1 | |
| CRK | v-crk avian sarcoma virus C110 oncogene homolog like | CRKII, p38 | |
| CRKL | v-crk avian sarcoma virus C110 oncogene homolog like | | |
| CRLF3 | Cytokine receptor-like factor 3 | CREME-9, CREME9, CRLM9, CYTOR4, FRWS, p48.2 | v |
| CRLS1 | Cardiolipin synthase 1 | C20orf155, CLS, CLS1, GCD10, dJ967N21.6 | |
| CRNKL1 | Crooked neck pre-mRNA splicing factor 1 | RP3-1002M6.1, CEF, CRN, CRI, HCRN, MST1021, CRY2 | |
| CROT | Carnitine O-octanoyltransferase | COT | |
| CRTAP | Cartilage associated protein | CASP, LEPREL3, OI7 | |
| CRTC3 | CREB regulated transcription coactivator 3 | TORC-3, TORC3 | |
| CRX | Cone-rod homeobox | CORD2, CRD, LCA7, OTX3 | |
| CRY2 | Cryptochrome circadian clock 2 | HCRY2, PHL2 | |
| CRYBG3 | Beta-gamma crystallin domain containing 3 | DKFZp667G2110 | |
| CRYGN | Crystallin, gamma N | | |
| CSDA | | | |

| | | | |
|------------|---|---|---|
| CSDAP1 | Cold shock domain protein A pseudogene 1 | | |
| CSDE1 | Cold shock domain containing ET, RNA-binding | RP5-1000E10.3, D1S155E, UNR | |
| CSF1 | Colony stimulating factor 1 (macrophage) | RP11-195M16.2, CSF-1, MCSF | |
| CSF2RA | Colony stimulating factor 2 receptor, alpha, | CD110, CDW110, CSF2RA, CSF2RA1, CSF2RA, | |
| CSF2RB | Colony stimulating factor 2 receptor, beta, | CSF2RB, CM, CSF2B1, CDW111, CMCSF2B, IE3RB, SMDP4 | |
| CSGALNACT1 | Chondroitin sulfate N-acetylglucosaminyltransferase 1 | SMQ050/PRO1207, CSGALNACT-1, CHGII, | |
| CSGALNACT2 | Chondroitin sulfate N-acetylglucosaminyltransferase 2 | beta4GalNAcT | |
| CSMD1 | CUB and Sushi multiple domains 1 | UNQ5952/PRO19863, PPP1R24 | |
| CSN2 | Casein beta | CASB | |
| CSNK1G1 | Casein kinase 1, gamma 1 | CK1gamma1 | |
| CSNK1G3 | Casein kinase 1, gamma 3 | CKI-gamma 3L, CSNK1G3 | |
| CSNK2A2 | Casein kinase 2, alpha prime polypeptide | CK2A2, CSNK2A1 | |
| CSRNP2 | Cysteine-serine-rich nuclear protein 2 | C12orf2, C12orf22, FAM130A1, PPP1R72, TAIP-12 | |
| CSRP3 | Cysteine and glycine-rich protein 3 (cardiac) | CLP, CMD1M, CMH12, CRP3, LMO4, MLP | |
| CSTF3 | Capping stimulation factor, 3' pre-mRNA, | CSTF-77 | |
| CTAGE1 | Cytotoxic T-cell lymphoma-associated antigen 1 | UCG_2059001, CTZ1.1, CTZ1.2, CTAGE, CTAGE-1, | |
| CTBS | Chitinase, di-N-acetyl- | CTAGE-2 | |
| CTCF | CCCTC-binding factor (zinc finger protein) | RP11-118B23.5, CTB | |
| CTDP1 | CTD (carboxy-terminal domain), RNA | MRD21 | |
| CTDSP2 | CTD (carboxy-terminal domain), RNA | CCFDN, FCP1 | |
| CTDSPL | CTD (carboxy-terminal domain), RNA | OS4, PSR2, SCP2 | |
| CTDSPL2 | CTD (carboxy-terminal domain), RNA | C3orf8, HYA22, PSR1, RBSP3, SCP3 | |
| CTGF | Connective tissue growth factor | HSPC058, HSPC129 | |
| CTH | Cystathionine gamma-lyase | CCN2, HCS24, IGFBP8, NOV2 | |
| CTLA4 | Cytotoxic T-lymphocyte-associated protein 4 | CD, CD152, CELIAC3, CTLA-4, GRD4, GSE, IDDM12 | |
| CTNNA1 | Catenin (cadherin-associated protein), alpha | CAP102 | |
| CTNNA3 | Catenin (cadherin-associated protein), alpha | RP11-433J16.1, ARVD13, VR22 | |
| CTNNB1 | Catenin (cadherin-associated protein), beta 1, | OK/SW-cl.35, CTNNB, MRD19, armadillo | v |
| CTNND1 | Catenin (cadherin-associated protein), delta | CAS, CTNND, P120CAS, P120CTN, p120, p120(CAS), | |
| CTNND2 | Catenin (cadherin-associated protein), delta | p120(CTN) | |
| CTNS | Cystinosis, lysosomal cystine transporter | GT24, NPRAP | |
| CTSB | Cathepsin B | CTNS-LSB, PQLC4 | |
| CTSC | Cathepsin C | APPS, CPSB | |
| | | CIT1, DIT-1, DIT1, DIT1, HMIS, J1, J1D, TALS, | |
| | | PDON1, PLS | |

| | | | |
|-----------|--|--|--|
| CTSE | Cathepsin E | CATE | |
| CTSF | Cathepsin F | CATSF, CLN13 | |
| CTSO | Cathepsin O | CTSO1 | |
| CTTNBP2 | Cortactin binding protein 2 | C7orf8, CORTBP2, Orf4 | |
| CTTNBP2NL | CTTNBP2 N-terminal like | | |
| CTXN2 | Cortixin 2 | | |
| CTXN3 | Cortixin 3 | KABE | |
| CUBN | Cubilin (intrinsic factor-cobalamin receptor) | RP11-416D8.1, IFCR, MGA1, gp280 | |
| CUL3 | Cullin 3 | CUL-3, PHA2E | |
| CUL4A | Cullin 4A | RP11-391H12.1 | |
| CUL4B | Cullin 4B | CUL-4B, MRXHF2, MRXS15, MRXSC, SFM2 | |
| CUL5 | Cullin 5 | VACM-1, VACM1 | |
| CUTC | CutC copper transporter | CGI-32 | |
| CUX1 | Cut-like homeobox 1 | CASF, CDF, CDF/Cut, CDF1, COT1, CUTL1, CUX, Cux, Cux/CDF, COL1MC, NHL10217, +100, +110, +200 | |
| CUX2 | Cut-like homeobox 2 | CDP2, CUTL2 | |
| CX3CL1 | Chemokine (C-X3-C motif) ligand 1 | A-152E3.2, ABCD-3, CSXKHC, CXC3, CXC3C, NTN, NTF, SCYD1, fractalkine, monocyte | |
| CXADRP2 | Coxsackie virus and adenovirus receptor | | |
| CXCL1 | Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity) | FSP, GRO1, GROa, MGSA, MGSA-a, NAP-3, SCYB1 | |
| CXCL12 | Chemokine (C-X-C motif) ligand 12 | IRH, PBSF, SCYB12, SDF1, TLSF, TPAR1 | |
| CXCL17 | Chemokine (C-X-C motif) ligand 17 | UNQ475/FR0642, DMC, DCip1, UNQ475, VCC-1, VCC1 | |
| CXCL2 | Chemokine (C-X-C motif) ligand 2 | CINC-2a, GRO2, GROb, MGSA-b, MIP-2a, MIP2, MIP2A, SCYB2 | |
| CXCL3 | Chemokine (C-X-C motif) ligand 3 | CINC-2b, GRO3, GROg, MIP-2b, MIP2B, SCYB3 | |
| CXCL5 | Chemokine (C-X-C motif) ligand 5 | ENA-78, SCYB5 | |
| CXCR2P1 | Chemokine (C-X-C motif) receptor 2 paralog 1 | | |
| CXCR6 | Chemokine (C-X-C motif) receptor 6 | BONZO, CD186, STRL33, TYMSTR | |
| CXorf21 | Chromosome X open reading frame 21 | | |
| CXorf22 | Chromosome X open reading frame 22 | RP11-307A17.1 | |
| CXorf23 | Chromosome X open reading frame 23 | RP11-2406.3 | |
| CXorf30 | Chromosome X open reading frame 30 | RP11-87M18.1 | |
| CXorf36 | Chromosome X open reading frame 36 | RC3_1981055, 4950578CT9KIK, DIATK, EFQL180Z, PR02742, LA425K1.1 | |
| CXorf40A | Chromosome X open reading frame 40A | XX-FW81066F1.1, CXorf40, EOLA1 | |
| CXorf40B | Chromosome X open reading frame 40B | | |
| CXorf48 | | | |

| | | | |
|----------|---|--|---|
| CYB561D1 | Cytochrome b561 family, member D1 | RP5-831G13.3 | |
| CYB5B | Cytochrome b5 type B (outer mitochondrial membrane) | RP11-140H17.1, CYB5-M, CYPB5M, OMB5 | |
| CYB5D1 | Cytochrome b5 domain containing 1 | | |
| CYB5R2 | Cytochrome b5 reductase 2 | B5R.2 | |
| CYB5R4 | Cytochrome b5 reductase 4 | RP4-676J13.1, NCB5OR, cb5/cb5R, dJ676J13.1 | |
| CYBB | Cytochrome b-245, beta polypeptide | AMCBX2, CCB, GP91-1, GP91-FHOX, GP91FHOX, IMD24, NOV2, P01, RHQV | |
| CYGB | Cytoglobin | HGB, STAP | |
| CYLD | Cylindromatosis (turban tumor syndrome) | HSPC037, BKSS, CDM11, CTED1, EAC, M11, M111, SPS, TEM, USBL2, CYLD | v |
| CYMP | Chymosin pseudogene | RP11-470L19.3 | |
| CYorf15A | | | |
| CYP11B1 | Cytochrome P450, family 11, subfamily B, | CPN1, CYP11B, FHI, P450C11 | |
| CYP19A1 | Cytochrome P450, family 19, subfamily A, | AKO, AKO1, CYP1, CTAK, CYP19, CYP19A, P-450ABOM | |
| CYP1B1 | Cytochrome P450, family 1, subfamily B, | CP1B, CYP1B1, GLC3A, P4501B1 | |
| CYP20A1 | Cytochrome P450, family 20, subfamily A, | UNQ667/PRO1301, CYP-M | |
| CYP26A1 | Cytochrome P450, family 20, subfamily A, | RP11-348J12.1, CP26, CYP26, P450RAI, P450RAI1 | |
| CYP26B1 | Cytochrome P450, family 20, subfamily B, | CYP26A2, P450RAI-2, P450RAI2, RHFCA | |
| CYP2B7P1 | polypeptide 1 | | |
| CYP2C18 | Cytochrome P450, family 2, subfamily C, | M11-40014.4, CFC1, CYP2C, CYP2C17, P450-0B/29C, P450HC17 | |
| CYP2C8 | Cytochrome P450, family 2, subfamily C, | CPC8, CYP11C8, MP-12/MP-20 | |
| CYP2R1 | Cytochrome P450, family 2, subfamily R, | | |
| CYP2U1 | Cytochrome P450, family 2, subfamily U, | P450TEC, SPG49, SPG56 | |
| CYP39A1 | Cytochrome P450, family 39, subfamily A, | | |
| CYP3A43 | Cytochrome P450, family 3, subfamily A, | | |
| CYP46A1 | Cytochrome P450, family 40, subfamily A, | CP46, CYP46 | |
| CYP4A11 | Cytochrome P450, family 4, subfamily A, | CP4Y, CYP4A2, CYP4AII | |
| CYP4F11 | Cytochrome P450, family 4, subfamily F, | CYPIVF11 | |
| CYP4F2 | Cytochrome P450, family 4, subfamily F, | CPF2 | |
| CYP4F3 | Cytochrome P450, family 4, subfamily F, | CPF3, CYP4F, LTB4H | |
| CYP4V2 | Cytochrome P450, family 4, subfamily V, | UNQ2560, BCD, CYP4AH1 | |
| CYP7A1 | Cytochrome P450, family 7, subfamily A, | CP7A, CYP7, CYPVII | |
| CYR61 | Cysteine-rich, angiogenic inducer, 61 | CCN1, GIG1, IGFBP10 | |
| CYS1 | Cystin 1 | | |
| CYTSA | | | |

| | | | |
|----------|--|---|---|
| CYTSB | | | |
| D2HGDH | D-2-hydroxyglutarate dehydrogenase | hCG_31745, D2HGD | |
| D4S234E | | | |
| DAAM1 | Dishevelled associated activator of morphogenesis 1 | | |
| DAB2IP | DAB2 interacting protein | RP11-298A17.1, AF9Q34, AIP-1, AIP1, DIP1/2 | |
| DACH1 | Dachshund family transcription factor 1 | RP11-512J14.1, DACH | |
| DACH2 | Dachshund family transcription factor 2 | RP11-345E19.1 | |
| DACT1 | Dishevelled-binding antagonist of beta-catenin 1 | DAPPER, DAPPER1, DPK1, PRODC, HDPK1, THYEX2 | |
| DACT3 | Dishevelled-binding antagonist of beta-catenin 3 | DAPPER3, RRR1 | |
| DAD1 | Defender against cell death 1 | OST2 | |
| DAGLB | Diacylglycerol lipase, beta | tcag7.842ETA, KCCR13L, DAGLB | |
| DAK | Dihydroxyacetone kinase 2 homolog (S. pombe) | NET45 | |
| DALRD3 | DALRK and coilin binding domain containing 3 | | |
| DAOA | D-amino acid oxidase activator | RP11-166E2.2, LG72, SG72 | |
| DAPP1 | Dual adaptor of phosphotyrosine and 5-phosphonucleotides | HSPC066, BAM32 | |
| DARS | Aspartyl-tRNA synthetase | PIG40, HBSL, aspRS | |
| DAXX | Death-domain associated protein | DADB-159G18.9, BING2, DAP6, EAP1 | v |
| DAZ1 | Deleted in azoospermia 1 | DAZ, SPGY | |
| DAZ2 | Deleted in azoospermia 2 | pDP1678 | |
| DAZ3 | Deleted in azoospermia 3 | pDP1679 | |
| DAZ4 | Deleted in azoospermia 4 | pDP1680, pDP1681 | |
| DAZAP2 | DAZ associated protein 2 | PRTB | |
| DAZL | Deleted in azoospermia-like | DAZH1, DAZLA, SPGYLA, DAZL | |
| DBF4B | DBF4 zinc finger B | UNQ3002, ASKL1, CHIFB, DRF1, ZDBF1B | |
| DBT | Dihydrobiopamine branched chain aminoxidase F2 | RP11-305E17.3, BCATEZ, BCKAD-EZ, BCKADEZ, EZ, F2B | |
| DBX2 | Developing brain homeobox 2 | | |
| DCAF11 | DDB1 and CUL4 associated factor 11 | GL014, PRO2389, WDR23 | |
| DCAF12L1 | DDB1 and CUL4 associated factor 12-like 1 | KIAA1892L, WDR40B | |
| DCAF16 | DDB1 and CUL4 associated factor 16 | C4orf30 | |
| DCAF17 | DDB1 and CUL4 associated factor 17 | C2orf37 | |
| DCAF4 | DDB1 and CUL4 associated factor 4 | WDR21, WDR21A | |
| DCAF4L1 | DDB1 and CUL4 associated factor 4-like 1 | WDR21B | |
| DCAF4L2 | DDB1 and CUL4 associated factor 4-like 2 | WDR21C | |

| | | | |
|---------|---|---|---|
| DCAF5 | DDB1 and CUL4 associated factor 5 | BCRG2, BCRP2, D14S1461E, WDR22 | |
| DCAF6 | DDB1 and CUL4 associated factor 6 | RP4-743H4.1, 1200000M0J0K1K, ARCAF1, IQWDT1, MCTP055, NRIP, DC326 | |
| DCAF8 | DDB1 and CUL4 associated factor 8 | RP11-574F21.1, GAN2, H326, WDR42A | |
| DCBLD1 | Discorin, CUB and ECEL domain containing 1 | RP1-94G16.1, dJ94G16.1 | |
| DCBLD2 | Discorin, CUB and ECEL domain containing 2 | CLCP1, ESDN | |
| DCC | DCC netrin 1 receptor | CRC18, CRCR1, IGDCC1, MRMV1, NTN1R1 | |
| DCLK1 | Doublecortin-like kinase 1 | RP11-115F14.1, CLT, CLICK1, DCAMKL1, DCDC5A, DCZ, CLIC1 | |
| DCLK2 | Doublecortin-like kinase 2 | DCZ, CLIC1, CLIC2, CLIC3, CLIC4, DCAMKL2, DCDC3, DCDC3B, DCK3 | |
| DCLK3 | Doublecortin-like kinase 3 | hCG_16695, CLR, DCAMKL3, DCDC3C, DCK3 | |
| DCLRE1C | DNA cross-link repair 1C | RP11-578C13.3, A-SCID, DCLRE1C, NS-SCID, SCDA, SNM1C | |
| DCN | Decorin | CSCD, DSPG2, PG40, PGII, PGS2, SLRR1B | |
| DCP1A | Decapping mRNA 1A | HSA275986, Nbla00360, SMAD4IP1, SMIF | |
| DCP2 | Decapping mRNA 2 | NUDT20 | |
| DCTD | DCMP deaminase | | |
| DCUN1D1 | DCN1, defective in cumm neddylation 1, DCN1; defective in cumm neddylation 1, | DCNL1, DCUN1L1, RP42, SCCRO, SCRO, Tes3 | |
| DCUN1D2 | DCN1, defective in cumm neddylation 1, | RP11-102K13.4, C13orf17 | |
| DCUN1D4 | DCN1, defective in cumm neddylation 1, domain containing 4 | | |
| DCX | Doublecortin | RP5-914P14.1, DBCN, DC, LISX, SCLH, XLIS | |
| DDAH1 | Dimethylarginine dimethylaminohydrolase 1 | RP4-621F18.1, DDAH, HEL-S-16 | |
| DDHD1 | DDHD domain containing 1 | PA-PLA1, PAPLA1, SPG28 | |
| DDHD2 | DDHD domain containing 2 | SAMWD1, SPG54, iPLA(1)gamma | |
| DDI2 | DNA-damage inducible 1 homolog 2 (D. rerio) | RP4-680D5.5 | |
| DDIT4 | DNA-damage-inducible transcript 4 | RP11-442H21.1, Dig2, REDD-1, REDD1 | |
| DDO | D-aspartate oxidase | RP1-261K5.2, DASOX-1, DDO-2, DDO | |
| DDTL | D-dopachrome tautomerase-like | KB-226F1.2 | |
| DDX10 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 10 | HRH-J8 | v |
| DDX12 | DEAD (Asp-Glu-Ala-Asp/His) box polypeptide 12 | CHLR2 | |
| DDX18 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 18 | MrDb | |
| DDX19A | DEAD (Asp-Glu-Ala-Asp) box polypeptide 19A | DDX19-DDX19L, DDX19L | |
| DDX20 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 20 | DP103, GEMIN3 | |
| DDX21 | DEAD (Asp-Glu-Ala-Asp) box helicase 21 | GUA, GURDB, RH-II/GU, RH-II/GuA | |
| DDX25 | DEAD (Asp-Glu-Ala-Asp) box helicase 25 | GRTH | |
| DDX26B | DEAD/II (Asp-Glu-Ala-Asp/His) box polypeptide 26B | RP11-432N13.1 | |

| | | | |
|---------|--|---|---|
| DDX31 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 21 | PPP1R25 | |
| DDX3X | DEAD (Asp-Glu-Ala-Asp) box helicase 3, A | DBX, DDX14, DDX3, HLP2 | |
| DDX3Y | DEAD (Asp-Glu-Ala-Asp) box helicase 3, Y | DBY | |
| DDX43 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 43 | CT13, HAGE | |
| DDX46 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 46 | PRPF5, Prp5 | |
| DDX47 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 47 | E4-DBP, HQ0256, MSTP162, RRP3 | |
| DDX5 | DEAD (Asp-Glu-Ala-Asp) box helicase 5 | G17P1, HLR1, HUM68, p68 | v |
| DDX50 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 50 | GU2, GUB, RH-II/GuB, mcdrh | |
| DDX51 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 51 | | |
| DDX52 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 52 | HUSSY-19, HUSSY19, ROK1 | |
| DDX55 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 55 | | |
| DDX58 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 58 | RP11-334P12.2, RIG-I, RIGI, RLR-1 | |
| DDX60 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 60 | | |
| DDX60L | DEAD (Asp-Glu-Ala-Asp) box polypeptide 60L | | |
| DEC1 | Deleted in esophageal cancer 1 | CTS9 | |
| DEF8 | Differentially expressed in TDC1 8 homolog (mouse) | | |
| DEFA4 | Defensin, alpha 4, corticostatin | DEF4, HNP-4, HP-4, HP4 | |
| DEFB132 | Defensin, beta 132 | RP5-1103G7.1, DEFB32, UNQ827 | |
| DEK | DEK proto-oncogene | D6S231E | v |
| DEM1 | | | |
| DENND1A | DENN/MADD domain containing 1A | RP11-230L22.3, FAM31A, KIAA1608 | |
| DENND1B | DENN/MADD domain containing 1B | RP11-53124.2, C1ORF18, C1orf218, FAM31B | |
| DENND3 | DENN/MADD domain containing 3 | | |
| DENND4A | DENN/MADD domain containing 4A | IRLB, MYCPBP | |
| DENND4B | DENN/MADD domain containing 4B | hCG_18235, KIAA0476 | |
| DENND4C | DENN/MADD domain containing 4C | RP11-513M16.1, C9orf55, C9orf55B, bA513M16.3 | |
| DENND5B | DENN/MADD domain containing 5B | | |
| DEPDC1 | DEP domain containing 1 | DEP.8-V2, DEPDC1A, SDP35, DEPDC1 | |
| DEPDC5 | DEP domain containing 5 | LL22NC03-113A11.1, DEP.5, FFEVF | |
| DEPDC6 | | | |
| DERL1 | Derlin 1 | UNQ243/PRO276, DER-1, DER1 | |
| DFFB | DNA fragmentation factor, 40 kDa, beta subunit (caspase-activated DNase) | RP13-531C17.1, CAD, CPAN, DFF-40, DFF2, DFF40 | |
| DGCR2 | DiGeorge syndrome critical region gene 2 | DGS-C, IDD, LAN, SEZ-12 | |

| | | | |
|---------|---|--|---|
| DGCR5 | DGeorge syndrome critical region gene 5 (non-protein coding) | LINC00037, NCRNA00037 | |
| DGCR8 | DGCR8 microprocessor complex subunit | LP4941, C22orf12, DGCRK6, Gy1, pasha | |
| DGKB | Diacylglycerol kinase, beta 90 kDa | DAGK2, DGK, DGK-BETA | |
| DGKD | Diacylglycerol kinase, delta 130 kDa | DGKdelta, dgkd-2 | |
| DGKE | Diacylglycerol kinase, epsilon 64 kDa | DAGK5, DAGK6, DGK, NPHS7 | |
| DGKH | Diacylglycerol kinase, eta | RP11-215B13.1, DGKeta | |
| DGKI | Diacylglycerol kinase, iota | DGK-IOTA | |
| DHCR24 | 24-Dehydrocholesterol reductase | DCE, Nbla03646, SELADIN1, seladin-1 | |
| DHDPSL | 4-Hydroxy-2-oxoglutarate aldolase 1 | KT11-546K25.9, C100H03, DHDPS2, DHDPSL, HIF3, NPL2 | |
| DHODH | Dihydroorotate dehydrogenase (quinone) | DHOdehase, POADS, URA1 | |
| DHRS2 | Dehydrogenase/reductase (SDR family) | HEP27, SDR25C1 | |
| DHRS4L2 | Dehydrogenase/reductase (SDR family) | SDR25C3 | |
| DHRS9 | Dehydrogenase/reductase (SDR family) | UNQ855/TKO1773, 3-alpha-HSD, 3ALPHA-HSD, KDIF- R1-PP325D9.2, C20H11, PDHK3X, DTRK3PTT, DURSX, SDR46C1, SDR76C, DURSX | |
| DHRSX | Dehydrogenase/reductase (SDR family) A- | | |
| DHTKD1 | Dehydrogenase ET and transketolase domain containing 1 | AMOXAD, CMT2Q | |
| DHX15 | DEAH (Asp-Glu-Ala-His) box helicase 15 | DBP1, DDX15, HRH2, PRP43, PRPF43, PrPp43p | |
| DHX29 | DEAH (Asp-Glu-Ala-His) box polypeptide 29 | DDX29 | |
| DHX33 | DEAH (Asp-Glu-Ala-His) box polypeptide 33 | DDX33 | |
| DHX35 | DEAH (Asp-Glu-Ala-His) box polypeptide 35 | DDX33 | |
| DHX40 | DEAH (Asp-Glu-Ala-His) box polypeptide 40 | ARG147, DDX40, PAD | |
| DHX57 | DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57 | DDX57 | |
| DIAPH1 | Diaphanous-related formin 1 | DFNA1, DIA1, DRF1, LFHL1, hDIA1 | |
| DIAPH3 | Diaphanous-related formin 3 | KT11-20F21.1, AN, AUNAI, DIA2, DRF3, NSDAN, Dica2, mDica2 | |
| DICER1 | Dicer 1, ribonuclease type III | DCR1, Dicer, Dicer1e, HERNA, MNG1, RMSE2 | v |
| DIDO1 | Death inducer-oblierator 1 | KT5-885E7.1, BTEL, C200H58, DAIT-1, DAIT1, DIDO2, DIDO2, DIO-1, DIO1, JH85L7.9 | |
| DIO2 | Deiodinase, iodothyronine, type II | 5DII, D2, DIOII, SelY, TXDI2 | |
| DIP2A | Dip2 disc-interacting protein 2 homolog A | C21orf106, DIP2 | |
| DIP2B | Dip2 disc-interacting protein 2 homolog C | RP11-486H9.2, KIAA0934 | |
| DIP2C | Dip2 disc-interacting protein 2 homolog C (Drosophila) | RP11-486H9.2, KIAA0934 | |
| DIRAS3 | DIRAS family, GTP-binding RAS-like 3 | ARHI, NOEY2 | |
| DIRC1 | Disrupted in renal carcinoma 1 | | |
| DIS3 | DIS3 exosome endoribonuclease and 5'-5' exoribonuclease | KT11-542J4.5, Z810028N0TRK, EXOSC11, KIAA1008, DDP44, dca2a | |
| DIS3L | DIS3 like exosome 3'-5' exoribonuclease | DIS3L1 | |

| | | | |
|--------------|---|--|--|
| DIS3L2 | DIS3 like 3'-5' exoribonuclease 2 | FAM6A, PRLMNS, hDIS3L2 | |
| DISC1 | Disrupted in schizophrenia 1 | RP4-730B13.1, C1orf136, SCZD9 | |
| DIXDC1 | DIX domain containing 1 | CCD1 | |
| DKC1 | Dyskeratosis congenita 1, dyskerin | CBF5, DKC, DKCX, NAP57, NOLA4, XAP101 | |
| DKFZP434L187 | Uncharacterized LOC26082 | | |
| DKFZP080D063 | | | |
| DKFZP080G132 | | | |
| DKFZP781G011 | | | |
| DKK1 | Dickkopf1 WNT signaling pathway inhibitor 1 | UNQ492/PRO1008, DKK-1, SK | |
| DKK3 | Dickkopf1 WNT signaling pathway inhibitor 3 | UNQ258/PRO295, REIC, RIG | |
| DLC1 | DLC1 Rho GTPase activating protein | ARHGAP7, HP, STARD12, p122-RhoGAP | |
| DLD | Dihydrolipoamide dehydrogenase | tcag7.39D, DLDH, E3, GCSL, LAD, PHE3, DLD | |
| DLEU1 | Deleted in lymphocytic leukemia 1 (non-pentamer domain) | RP11-173B12.1, BCM3, BCM31, DLE1, DLEU2, LEU1, LEU2, LINC00021, NCRNA00021, XTRC | |
| DLEU7 | Deleted in lymphocytic leukemia, 7 | | |
| DLG1 | Discs, large homolog 1 (Drosophila) | DLGH1, SAP-97, SAP97, dJ1061C18.1.1, hdlg | |
| DLG2 | Discs, large homolog 2 (Drosophila) | PPP1R58, PSD-93, PSD93, chapsyn-110 | |
| DLGAP1 | Discs, large (Drosophila) homolog-1 | DAF-1, DAF-1-ALPHA, DAF-1-BETA, DAF1A, DLGAP1B, CKAR, SAPAP1, LCKAR, DLGAP1 | |
| DLGAP2 | Discs, large (Drosophila) homolog-2 | DAP2, SAPAP2 | |
| DLGAP5 | Discs, large (Drosophila) homolog-associated protein 5 | DLG7, HURP | |
| DLK2 | Delta-like 2 homolog (Drosophila) | RP5-895C5.2, DLK-2, EGFL9 | |
| DLL1 | Delta-like 1 (Drosophila) | UNQ146/PRO172, DELTA1, DL1, Delta | |
| DLL4 | Delta-like 4 (Drosophila) | UNQ1895/PRO4341, hdelta2 | |
| DLX1 | Distal-less homeobox 1 | | |
| DLX3 | Distal-less homeobox 3 | AI4, TDO | |
| DLX5 | Distal-less homeobox 5 | SHFM1D | |
| DLX6 | Distal-less homeobox 6 | | |
| DMAP1 | DNA methyltransferase 1 associated protein 1 | RP5-891H21.2, DNMAF1, DNMTAF1, EAF2, MEAF2, SWC4 | |
| DMBX1 | Diencephalon/mesencephalon homeobox 1 | MBX, OTX3, PAXB | |
| DMC1 | DNA meiotic recombinase 1 | RP1-199H16.4H, LIM15, dJ199H16.1, DMC1 | |
| DMGDH | Dimethylglycine dehydrogenase | DMGDHD, ME2GLYDH | |
| DMP1 | Dentin matrix acidic phosphoprotein 1 | ARHP, ARHR, DMP-1 | |
| DMRT1 | Doublesex and mab-5 related transcription factor 1 | CT154, DMT1 | |
| DMRT3 | Doublesex and mab-5 related transcription factor 3 | RP11-143M15.2, DMRTA3 | |

| | | | |
|---------|--|---|--|
| DMRTC1 | DMRT-like family C1 | | |
| DMTF1 | Cyclic D binding myo-like transcription factor | DMP1, DMTF, MRUL, hDMP1 | |
| DMWD | <i>Dystrophia myotomica</i> , WD repeat containing | D19S593E, DMR-N9, DMRN9, gene59 | |
| DMXL1 | Dmx-like 1 | | |
| DMXL2 | Dmx-like 2 | RC3 | |
| DNAH14 | Dynein, axonemal, heavy chain 14 | RP11-328N1.1, C1orf67, Dnahc14, HL-18, HL18 | |
| DNAH5 | Dynein, axonemal, heavy chain 5 | CILD3, DNAHC5, HL1, KTGNR, PCD | |
| DNAH8 | Dynein, axonemal, heavy chain 8 | RP1-202I21.7, ATPase, hdhc9 | |
| DNAH9 | Dynein, axonemal, heavy chain 9 | DNAH17L, DNEL1, DYH9, Dnahc9, HL-20, HL20 | |
| DNAJA2 | DnaJ (Hsp40) homolog, subfamily A, member 2 | CPK3, DJ3, DJAZ, DNAJ, DNJ3, HHR23, PRO3013, RNF2 | |
| DNAJA3 | DnaJ (Hsp40) homolog, subfamily A, member 3 | HCA57, TID1, hTID-1 | |
| DNAJA4 | DnaJ (Hsp40) homolog, subfamily A, member 4 | MST104, MSTP104, PRO1472 | |
| DNAJB1 | DnaJ (Hsp40) homolog, subfamily B, member 1 | HSPF1, Hdj1, Hsp40, RSPH16B, Sis1 | |
| DNAJB12 | DnaJ (Hsp40) homolog, subfamily B, member 12 | DJ10 | |
| DNAJB14 | DnaJ (Hsp40) homolog, subfamily B, member 14 | UNQ9427/PRO34683, EGNR9427, PRO34683 | |
| DNAJB3 | DnaJ (Hsp40) homolog, subfamily B, member 3 | DnaJ (Hsp40) homolog, subfamily B, member 3 | |
| DNAJB5 | DnaJ (Hsp40) homolog, subfamily B, member 5 | RP11-392A14.5, Hsc40 | |
| DNAJB6 | DnaJ (Hsp40) homolog, subfamily B, member 6 | Ucag7.555, DJ4, DnaJ, HHR21, HSP-2, HSP2, LOMD1D, LOMD1E, MBL, MSL1 | |
| DNAJB7 | DnaJ (Hsp40) homolog, subfamily B, member 7 | DJ5, HSC3 | |
| DNAJC10 | DnaJ (Hsp40) homolog, subfamily C, member 10 | UNQ495/PRO1012, ERdj5, JPDI, MTHr, PDIA19 | |
| DNAJC13 | DnaJ (Hsp40) homolog, subfamily C, member 13 | RME8 | |
| DNAJC15 | DnaJ (Hsp40) homolog, subfamily C, member 15 | GIG22, DNAJD1, HSD18, MCJ | |
| DNAJC16 | DnaJ (Hsp40) homolog, subfamily C, member 16 | RP4-680D5.1 | |
| DNAJC18 | DnaJ (Hsp40) homolog, subfamily C, member 18 | | |
| DNAJC2 | DnaJ (Hsp40) homolog, subfamily C, member 2 | MPHOSPH11, MPP11, ZRF1, ZUO1 | |
| DNAJC21 | DnaJ (Hsp40) homolog, subfamily C, member 21 | DNAJA5, GS3, JJJ1 | |
| DNAJC24 | DnaJ (Hsp40) homolog, subfamily C, member 24 | AC108456.1, DPH4, JJJ3, ZCSL3 | |
| DNAJC25 | DnaJ (Hsp40) homolog, subfamily C, member 25 | bA16L21.2.1 | |
| DNAJC27 | DnaJ (Hsp40) homolog, subfamily C, member 27 | RBJ, RabJS | |
| DNAJC3 | DnaJ (Hsp40) homolog, subfamily C, member 3 | ERdj6, HP58, P58, P58IPK, PRKRI | |
| DNAJC30 | DnaJ (Hsp40) homolog, subfamily C, member 30 | WBSCR18 | |
| DNAJC5 | DnaJ (Hsp40) homolog, subfamily C, member 5 | CLN4, CLN4B, CSPA, NCL, DNAJC5 | |
| DNAJC5B | DnaJ (Hsp40) homolog, subfamily C, member 5 beta | CSP-beta | |

| | | | |
|-----------|---|--|---|
| DNAJC5G | DnaJ (Hsp40) homolog, subfamily C, | CSP-gamma | |
| DNAJC6 | DnaJ (Hsp40) homolog, subfamily C, | DJC6, PARK19 | |
| DNAJC7 | DnaJ (Hsp40) homolog, subfamily C, | DJ11, DJC7, TPR2, TTC2 | |
| DNAL1 | member 7 | | |
| DNAL1 | Dynein, axonemal, light chain 1 | C14orf168, CILD16 | |
| DNASE1 | Deoxyribonuclease I | DNL1, DRNI | |
| DNER | Delta/notch-like EGF repeat containing | UNQ262/PRO299, UNQ26, bet | |
| DNHD1 | Dynein heavy chain domain 1 | UNQ5781/PRO12970, C11orf47, CCDC33, DRCBTL, DNHD1 | |
| DNM1 | Dynamamin 1 | DNM | |
| DNM2 | Dynamamin 2 | CMT2M, CMTD1, CMTD1B, DFCMTB, DTN2, DNM2, LCCS5 | v |
| DNM3 | Dynamamin 3 | RP1-106H8.3, Dyna III | |
| DNMT3B | DNA (cytosine-5-)-methyltransferase 3 beta | RP5-1085F17.2, ICF, ICF1, M.HsaIIIB | |
| DOC2A | Double C2-like domains, alpha | Doc2 | |
| DOCK10 | Dedicator of cytokinesis 10 | DRIP2, Nbla10300, ZIZ3 | |
| DOCK2 | Dedicator of cytokinesis2 | | |
| DOCK4 | Dedicator of cytokinesis4 | WUGSC:H_GS034D21.1 | |
| DOCK5 | Dedicator of cytokinesis5 | | |
| DOCK7 | Dedicator of cytokinesis7 | RP4-740B20.2, EIEE23, ZIR2 | |
| DOCK8 | Dedicator of cytokinesis8 | RP11-165F24.7, HEL-205, MRD2, ZIR8 | |
| DOCK9 | Dedicator of cytokinesis9 | RP11-155N3.2, ZIZ1, ZIZIMIN1 | |
| DOPEY1 | Dopey family member 1 | RP1-202D23.2, KIAA1117, dJ202D23.2 | |
| DOPEY2 | Dopey family member 2 | 21orf5, C21orf5 | |
| DOT1L | DOT1-like histone H3K79 methyltransferase | DOT1, KMT4 | |
| DPAGT1 | Donchyl-phosphate (UDP-N-acetylglucosamine) N | ALG7, CDG-1j, CDG1j, CMSTAZ, DTIS300, DPAT1, DPACT, DPACT2, G1PT, GPT, HACT, HCAT | |
| DPF1 | D4, zinc and double PHD fingers family 1 | BAF45b, NEUD4, neuro-d4 | |
| DPH3 | Diphthamide biosynthesis 3 | DELGIP, DELGIP1, DESR1A, KTI11, ZCSL2, DPH3 | |
| DPP10 | Dipeptidyl-peptidase 10 (non-functional) | DPL2, DPPY, DPRP-3, DPRP3 | |
| DPP6 | Dipeptidyl-peptidase 6 | DPPX, VF2 | |
| DPPA2 | Developmental pluripotency associated 2 | CT100, ECAT15-2, PESCRG1 | |
| DPPA3 | Developmental pluripotency associated 3 | 2410075G02Rik, PCG7, PGC7, Stella | |
| DPY19L1 | Dpy-19-like 1 (<i>C. elegans</i>) | hCG_1645499 | |
| DPY19L2 | Dpy-19-like 2 (<i>C. elegans</i>) | UNQ3127/PRO10284, SPATA34, SPGF9 | |
| DPY19L2P1 | DPY19L2 pseudogene 1 | | |
| DPY19L2P3 | DPY19L2 pseudogene 3 | | |

| | | | |
|---------|---|--|--|
| DPY19L4 | Dpy-19-like 4 (<i>C. elegans</i>) | | |
| DPY30 | Dpy-30 homolog (<i>C. elegans</i>) | Cps25, HDPY-30, Saf19 | |
| DPYD | Dihydropyrimidine dehydrogenase | DHP, DHPDHASE, DPD | |
| DPYSL2 | Dihydropyrimidinase-like 2 | CRMP-2, CRMP2, DHPK12, DHP-2, DHP2, INZAS, ULIP2, ULIP2 | |
| DPYSL5 | Dihydropyrimidinase-like 5 | CRAM, CRMP-5, CRMP5, Ulip6 | |
| DR1 | Down-regulator of transcription 1, TDP-1 | NC2, NC2-BETA | |
| DRAM1 | DNA-damage regulated autophagy modulator 1 | DRAM | |
| DRD2 | Dopamine receptor D2 | D2DR, D2R | |
| DRP2 | Dystrophin related protein 2 | GHc-521F8.2, DRP-2 | |
| DSC1 | Desmocollin 1 | CDHF1, DG2/DG3 | |
| DSC2 | Desmocollin 2 | ARVD11, CDHF2, DG2, DGII/III, DSC3 | |
| DSC3 | Desmocollin 3 | CDHF3, DSC, DSC1, DSC2, DSC4, HT-CP | |
| DSCR8 | Down syndrome critical region gene 8 | C210H05, C125.1a, C125.1b, MIMIA-1, MIMIA-1a, MIMIA-1b, MMA1, MTAC2 | |
| DSE | Dermatan sulfate epimerase | DSEPPI, EDSCM2, SART-2, SART2, DSE | |
| DSEL | Dermatan sulfate epimerase-like | C18orf4 | |
| DSN1 | DSN1, MIST2 kinetochore complex component | KIF3-409A15.1, C200H172, KINL3, MIST3, W409A15.2, KYNL2 | |
| DST | Dystonin | KIF3-501H4.2, D1240, D1A, D1A01, CATA-15, CATE15, D681401, DMIL-RT, EDCP2, USAN6 | |
| DSTN | Destrin (actin depolymerizing factor) | ACTDP, ADF, HEL32, bA462D18.2 | |
| DSTYK | Dual serine/threonine and tyrosine protein kinase | HDCMD38P, CAKUT1, DustyPK, RIP5, RIPK5 | |
| DTD1 | D-tyrosyl-tRNA deacylase 1 | C200H88, DCL-B, DCLB, HAKS2, UA3793.3, bA555E18.1, paa_69 | |
| DTNA | Dystrobrevin, alpha | D18S892E, DRP3, DTN, DTN-A, LVNC1 | |
| DTNB | Dystrobrevin, beta | | |
| DTWD1 | DTW domain containing 1 | MDS009 | |
| DTX4 | Deltex 4, E3 ubiquitin ligase | RNF155 | |
| DUOX2 | Dual oxidase 2 | LNOX2, NOXEF2, P138-TOX, TDH6, THOX2 | |
| DUSP10 | Dual specificity phosphatase 10 | MKP-5, MKP5 | |
| DUSP11 | Dual specificity phosphatase 11 (KIN4/KIN1 complex 1, interactor) | PIR1 | |
| DUSP13 | Dual specificity phosphatase 13 | KIF11-46713.0, BDDFA, DUSP13B, MDS1, SKNF4, TMDB, DUSP13 | |
| DUSP19 | Dual specificity phosphatase 19 | DUSP17, LMWDSP3, SKRP1, TS-DSP1 | |
| DUSP22 | Dual specificity phosphatase 22 | KIF11-528C17.1, JKAP, JSF-1, JSF1, LMW-DSP2, LMWDSP2, MZB, MZBV, VHV | |
| DUSP26 | Dual specificity phosphatase 26 | DUSP24, LDP-4, MKP8, NATA1, SKRP3 | |
| DUSP28 | Dual specificity phosphatase 28 | DUSP26, VHP | |
| DUSP3 | Dual specificity phosphatase 3 | VHR | |

| | | | |
|----------|--|---|---|
| DUSP5 | Dual specificity phosphatase 5 | DUSP, HVH3 | |
| DUSP5P | Dual specificity phosphatase 5 pseudogene 1 | RP4-621O15.1, DUSP5P | |
| DUSP6 | Dual specificity phosphatase 6 | HH19, MKP3, PYST1 | |
| DUSP7 | Dual specificity phosphatase 7 | MKPX, PYST2 | |
| DUT | Deoxyuridine triphosphatase | dUTPase | |
| DVL2 | Dishevelled segment polarity protein 2 | | |
| DYM | Dymeclin | DMC, SMC | |
| DYNC1I1 | Dynein, cytoplasmic 1, intermediate chain 1 | DNCI1, DNCIC1 | |
| DYNC1LI2 | Dynein, cytoplasmic 1, light intermediate chain 2 | DNCLI2, LIC2 | |
| DYNC2H1 | Dynein, cytoplasmic 2, heavy chain 1 | ATD5, DINC10, DINC2, DINC12, DTH1B, SKP32B, SPTD2, hJk-11 | |
| DYNC2LI1 | Dynein, cytoplasmic 2, light intermediate chain 1 | CGI-60, D2LIC, LIC3 | |
| DYNLRB1 | Dynein, light chain, roadblock-type 1 | HSPC162, BITH, BLP, DNCL2A, DNLC2A, ROBLD1 | |
| DYRK2 | Dual-specificity tyrosine-(1)-kinase 2 | | |
| DYRK3 | Dual-specificity tyrosine-(1)-kinase 3 | RP11-343H5.2, DYRK5, RED, REDK, hYAK3-2 | |
| DYSF | Dysferlin | FER1L1, LGMD2B, MMD1 | |
| DZIP1L | DAZ interacting zinc finger protein 1-like | DZIP2 | |
| DZIP3 | DAZ interacting zinc finger protein 3 | PPP1R66, UURF2, hRUL138 | |
| E2F1 | E2F transcription factor 1 | E2F-1, RBAP1, RBBP3, RBP3 | |
| E2F2 | E2F transcription factor 2 | E2F-2 | |
| E2F5 | E2F transcription factor 5, p130-binding | E2F-5, | |
| E2F6 | E2F transcription factor 6 | E2F-6, | |
| E2F7 | E2F transcription factor 7 | | |
| EAF1 | ELL associated factor 1 | | |
| EAF2 | ELL associated factor 2 | BM-040, BM040, TRAITS, U19 | |
| EBAG9 | Estrogen receptor binding site associated, antigen 9 | EB9, PDAF | |
| EBF2 | Early B cell factor 2 | COE2, EBF-2, O/E-3, OE-3 | |
| EBF3 | Early B-cell factor 3 | RP11-234G16.3, COE3, EBF-3, O/E-2, OE-2 | |
| ECHDC2 | Enoyl CoA hydratase domain containing 2 | | |
| ECM1 | Extracellular matrix protein 1 | RP11-54A4.6, URBWD | |
| ECT2 | Epithelial cell transforming 2 | ARHGEF31 | |
| ECT2L | Epithelial cell transforming 2 like | RP3-30919.3, ANICL152, C00H91, FBAO49, LTD11, RP11-351K23.5, ECTD1, EDT1, EDT1-A1, EDT1-A2-A1, UNQ-2448/PROJ271PROJ4080, EDA-A2K, EDAA2K, TNFRSF27, NEDAB | √ |
| EDA | Ectodysplasin A | | |
| EDA2R | Ectodysplasin A2 receptor | | |

| | | | |
|----------|--|---|---|
| EDAR | Ectodysplasin A receptor | DL, ECTD10A, ECTD10B, EDTR, EDS, EDS, EDA-A1B, EDA1B, EDA2, IRM1 | |
| EDARADD | EDAR-associated death domain | RP4-670F13.1, ECTD11A, ECTD11B, ED3, EDA3 | |
| EDEM1 | Eik degradation enhancer, mannosidase alpha | EDEM | |
| EDEM2 | Eik degradation enhancer, mannosidase alpha | UNQ573/PRO1135, C20orf31, C20orf49, bA4204.1 | |
| EDEM3 | Eik degradation enhancer, mannosidase alpha | C1orf22 | |
| EDN3 | Endothelin 3 | RP4-614C15.1, ET-3, ET3, HSCR4, PPET3, WS4B | |
| EDNRA | Endothelin receptor type A | ET-A, ETA, ETA-R, ETAR, ETRA, hET-AR | |
| EDNRB | Endothelin receptor type B | EDNRB, HSCR, HSCR2, WS4A | |
| EEA1 | Early endosome antigen 1 | MST105, MSTP105, ZFYVE2 | |
| EED | Embryonic ectoderm development | HEED, WAIT1 | |
| EEF1A1 | Eukaryotic translation elongation factor 1 | EEF1A1, EEF1A2, CCS-3, CCS3, EEF1A1, EEF-1, EEF1A, EEF1A, EEF1A, CRAE1EF, UNCG16202, LENG7, PTH | |
| EEF1A1P9 | Eukaryotic translation elongation factor 1 | EEF1AL7 | |
| EEF1DP3 | Eukaryotic translation elongation factor 1 | | |
| EEF1E1 | Eukaryotic translation elongation factor 1 | RP3-511E16.1, AIMP3, P18 | |
| EEF2K | Eukaryotic elongation factor-2 kinase | HSU93850, eEF-2K | |
| EEPDI1 | Endonuclease/exonuclease/phosphatase | HSPC107 | |
| EFCAB2 | EF-hand calcium binding domain 2 | CFAP200, DRC8 | |
| EFCAB4B | | | |
| EFCAB5 | EF-hand calcium binding domain 5 | | |
| EFHA2 | | | |
| EFHC1 | EF-hand domain (C-terminal) containing 1 | EJM1, dJ304B14.2 | |
| EFHC2 | EF-hand domain (C-terminal) containing 2 | RP11-334D18.1, MRX74, dJ1158H2.1 | |
| EFNA5 | Ephrin-A5 | AF1, EFL5, EPLG7, GLC1M, LERK7, RAGS | |
| EFR3B | EFR3 homolog B (<i>S. cerevisiae</i>) | RP11-509E16.1, KIAA0953 | |
| EFS | Embryonal Fyn-associated substrate | CAS3, CASS31, EFS2, HEFS, SIN, EFS | |
| EFTUD2 | Elongation factor Tu GTP binding domain | EIF2G2, EIF2G1, SNRNP110, Smr110, Smr114, U5-116KD | |
| EGF | Epidermal growth factor | HOMG4, URG | |
| EGFLAM | EGF-like, fibronectin type III and laminin G | AGRINL, AGRNL, PIKA | |
| EGFR | Epidermal growth factor receptor | ERBB, ERBB1, HER1, PIG61, mENA | v |
| EGLN1 | Egl-9 family hypoxia-inducible factor 1 | FNAS-118, C10H12, ECT13, HIF-1H2, HIF1H2, HIF1-2, HIF2, HIF2, SM20, ZMYND6 | |
| EGLN2 | Egl-9 family hypoxia-inducible factor 2 | EIT6, HIF-PH1, HIFPH1, HPH-1, HPH-3, PHD1 | |
| EGR1 | Early growth response 1 | AT225, G0350, KROX-24, NG1FA, T158, ZNF208, ZNF225 | |
| EGR2 | Early growth response 2 | AT591, CMT1D, CMT4E, KROX20 | |

| | | | |
|----------|---|---|---|
| EGR3 | Early growth response 3 | EGR-3, PILOT | |
| EHBP1 | EH domain binding protein 1 | HPC12, NACSIN | |
| EHD1 | EH-domain containing 1 | CDABP0131, H-PAST, HPAST1, PAST, PAST1 | |
| EHF | Ets homologous factor | ESE3, ESE3B, ESEJ | |
| EHHADH | Ethanol dehydrogenase | ECHD, FRST3, L-PBE, LBFP, LBP, PBFE | |
| EI24 | Etoposide induced 2.4 | EPG4, PIG8, TP53I8 | |
| EID1 | E1500 interacting inhibitor of differentiation 1 | FNAS-22, C150H5, CK11, EID-1, IKO45020, PTD014, RDD31 | |
| EIF1 | Eukaryotic translation initiation factor 1 | A121, EIF-1A, ISO1, SUI1, EIF1 | |
| EIF1AX | Eukaryotic translation initiation factor 1A, alpha | RI11-595110.1, EIF1A, EIF1A1, EIF4C, EIF-1A, EIF-4C | |
| EIF1AY | Eukaryotic translation initiation factor 1A, gamma | eIF-4C | |
| EIF2A | Eukaryotic translation initiation factor 2A | CDA02, EIF-2A, MST089, MSTP004, MSTP089 | |
| EIF2AK1 | Eukaryotic translation initiation factor 2A kinase 1 | PRO1362, HCR, HRI | |
| EIF2AK4 | Eukaryotic translation initiation factor 2A kinase 4 | GCN2, PVOD2 | |
| EIF2B2 | Eukaryotic translation initiation factor 2B, subunit 2 | EIF-2Bbeta, EIF2B | |
| EIF2B5 | Eukaryotic translation initiation factor 2B, subunit 5, similar to 2B | CACH, CLE, EIF-2B, EIF2Bepsilon, LVWM | |
| EIF2C1 | | | |
| EIF2C4 | | | |
| EIF2S3 | Eukaryotic translation initiation factor 2, subunit 3 | EIF2, EIF2G, EIF2gamma, eIF-2gA | |
| EIF3B | Eukaryotic translation initiation factor 3, subunit B | EIF3-ETA, EIF3-P110, EIF3-P116, EIF3S9, PRT1 | |
| EIF3D | Eukaryotic translation initiation factor 3, subunit D | RP5-1119A7.12-003, EIF3S7, eIF3-p66, eIF3-zeta | |
| EIF4A2 | Eukaryotic translation initiation factor 4A2 | BM-010, DDX2B, EIF4A, EIF4F, eIF-4A-II, eIF4A-II | v |
| EIF4E2 | Eukaryotic translation initiation factor 4E, subunit 2 | 4E-LP, 4EHP, EIF4EL3, IF4e | |
| EIF4E3 | Eukaryotic translation initiation factor 4E, subunit 3 | eIF-4E3, eIF4E-3 | |
| EIF4EBP2 | Eukaryotic translation initiation factor 4E binding protein 2 | 4EBP2, PHASII | |
| EIF4H | Eukaryotic translation initiation factor 4H | WBSCR1, WSCR1, eIF-4H | |
| EIF5 | Eukaryotic translation initiation factor 5 | EIF-5, EIF-5A | |
| EIF5A2 | Eukaryotic translation initiation factor 5A2 | EIF-5A2, eIF5AII | |
| EIF5AL1 | Eukaryotic translation initiation factor 5A-like 1 | RP11-342M3.3, EIF5AP1, bA342M3.3 | |
| ELAC1 | ElaC ribonuclease Z 1 | D29 | |
| ELAVL1 | ELAV like RNA binding protein 1 | ELAV1, HUR, Hua, MeIG | |
| ELAVL2 | ELAV like neuron-specific RNA binding protein 2 | RP11-315I14.4, HEL-N1, HELN1, HUB | |
| ELAVL3 | ELAV like neuron-specific RNA binding protein 3 | HUC, HUCL, PLE21 | |
| ELAVL4 | ELAV like neuron-specific RNA binding protein 4 | HUD, PNEM | |

| | | | |
|--------|---|--|---|
| ELF2 | E74-like factor 2 (ets domain transcription factor) | EC52, NERF, NERF-1A, NERF-1B, NERF-1a,b, NERF-2 | |
| ELF5 | E74-like factor 5 (ets domain transcription factor) | ESE2 | |
| ELK1 | ELK1, member of ETS oncogene family | | |
| ELK3 | ELK3, ETS-domain protein (SH1 accessory protein 3) | ERP, NET, SAP2 | |
| ELL2 | Elongation factor, RNA polymerase II, 2 | | |
| ELMOD3 | ELMO/CED-12 domain containing 3 | PP4068, DFNB88, LST3, RBED1, RBM29 | |
| ELN | Elastin | SVAS, WBS, WS | √ |
| ELOVL2 | ELOVL fatty acid elongase 2 | SSC2 | |
| ELOVL5 | ELOVL fatty acid elongase 5 | RP3-483K16.1, HELO1, SCA38, dJ483K16.1 | |
| ELOVL6 | ELOVL fatty acid elongase 6 | Lce2, rELO2 | |
| ELP2P | | | |
| ELTD1 | EGR, ratropin and seven transmembrane domain containing 1 | hCG_14667, ETL, KPG_003 | |
| EMB | Embigin | GP70 | |
| EMG1 | EMG1 N1-specific pseudouridine | C2F, Grcc2f, NEP1 | |
| EML1 | Ectoderm microtubule associated protein 1 | ELP79, EMAP, EMAPL, HuEMAP | |
| EML4 | Ectoderm microtubule associated protein 4 | C2orf2, ELP120, EMAP-4, EMAPL4, ROPP120 | √ |
| EML6 | Ectoderm microtubule associated protein 6 | | |
| EMP2 | Epithelial membrane protein 2 | NPHS10, XMP | |
| EMR1 | Egr-like module containing, mucin-like, hormone receptor like 2 | TM7LN3 | |
| EMR2 | Egr-like module containing, mucin-like, hormone receptor like 2 | CD312 | |
| EMX2 | Empty spiracles homeobox 2 | | |
| EN1 | Engrailed homeobox 1 | | |
| EN2 | Engrailed homeobox 2 | tcag7.568 | |
| ENAH | Enabled homolog (Drosophila) | RP11-496N12.7, ENA, MENA, NDPP1 | |
| ENDOD1 | Endonuclease domain containing 1 | | |
| ENOX2 | Ecto-NOX disulfide-thiol exchanger 2 | RP5-875H3.1, APK1, COVA1, tNOX | |
| ENPP1 | Ectonucleotide disphosphatase/cholesterol esterase 1 | ANKK2, COLLED, MOST, NPT1, NPT5, PC-1, PCAT, PDND1 | |
| ENPP5 | Ectonucleotide disphosphatase/cholesterol esterase 5 | UNQ550/PRO1107, NPP-5 | |
| ENPP6 | Ectonucleotide disphosphatase/cholesterol esterase 6 | UNQ1889/PRO4334, NPP6 | |
| ENSA | Endosulfine alpha | RP11-54A4.10-004, ARPP-19e | |
| ENTPD1 | Ectonucleoside triphosphate diphosphohydrolase 1 | ATPDase, CD39, NTPDase-1, SPG64 | |
| ENTPD4 | Ectonucleoside triphosphate diphosphohydrolase 4 | LALP70, LAP70, LYSAL1, NTPDase-4, UDPase | |
| ENTPD6 | Ectonucleoside triphosphate diphosphohydrolase 6 | NT 7-758115.3, CD39L2, IL-6SAG, IL0312, NTPDase-6, H728D15.2 | |

| | | | |
|----------|--|---|---|
| ENTPD7 | Ectonucleoside triphosphate diphosphohydrolase 7 | RP11-483F11.1, LALP1 | |
| ENY2 | Enhancer of yellow 2 homolog (Drosophila) | DC6, e(y)2 | |
| EP400 | E1A binding protein p400 | CAGH32, P400, TNRC12 | |
| EPB41 | Erythrocyte membrane protein band 4.1 | RP11-242O24.1, 4.1R, EL1, HE | |
| EPB41L3 | Erythrocyte membrane protein band 4.1-like 3 | 4.1B, DAL-1, DAL1 | |
| EPB41L4A | Erythrocyte membrane protein band 4.1-like 4A | EPB41L4, NBL4 | |
| EPB41L4B | Erythrocyte membrane protein band 4.1-like 4B | CG1, EHM2 | |
| EPB41L5 | Erythrocyte membrane protein band 4.1-like 5 | BE37, YMO1 | |
| EPB49 | | | |
| EPC2 | Enhancer of polycomb homolog 2 (Drosophila) | EPC-LIKE | |
| EPDR1 | Ependymin related 1 | EPDR, MERP-1, MERP1, UCC1 | |
| EPGN | Epithelial mitogen | UNQ3072, ALGV3072, EPG, PRO9904 | |
| EPHA2 | EPH receptor A2 | ARCC2, CTPA, CTPP1, CTRCT6, ECK | |
| EPHA3 | EPH receptor A3 | EK4, ETK, ETK1, HEK, HEK4, TYRO4 | |
| EPHA4 | EPH receptor A4 | HEK8, SEK, TYRO1 | |
| EPHA5 | EPH receptor A5 | CEK7, EHK-1, EHK1, EK7, HEK7, TYRO4 | |
| EPHA7 | EPH receptor A7 | EHK-3, EHK3, EK11, HEK11 | |
| EPHB1 | EPH receptor B1 | ELK, EPHT2, Hek6, NET | |
| EPHB2 | EPH receptor B2 | CAPB, DRT, EK5, EPHT3, ERK, Hek5, PCBC, Tyro5 | |
| EPM2A | Epilepsy, progressive myoclonus type 2A, Lafora disease (Lafora) | RP1-28C20.2, EPM2, MELF | |
| EPM2AIP1 | EPM2A (laforin) interacting protein 1 | My007 | |
| EPN2 | Epsin 2 | EHB21 | |
| EPS15 | Epidermal growth factor receptor pathway protein 15 | AF-1P, AF1P, MLLT5 | v |
| EPS15L1 | Epidermal growth factor receptor pathway protein 15L1 | EPS15R | |
| EPS8 | Epidermal growth factor receptor pathway protein 8 | DFNB102 | |
| EPT1 | Endothelinreceptor-specific phosphatase 1 (CD11b-related) | SELI, SEPI | |
| ERAP1 | Endoplasmic reticulum aminopeptidase 1 | UNQ364/TKO1134, A-LAP, ALAP, APPLS, ARTS-1, ARTS1, ERA-AP, ERA-AP1, PILS-AP, PILS-AP1 | |
| ERAP2 | Endoplasmic reticulum aminopeptidase 2 | L-RAP, LRAP | |
| ERAS | ES cell expressed Ras | HRAS2, HRASP | |
| ERBB4 | v-crb-b2 avian erythroblastic leukemia viral oncogene homolog 4 | ALS19, HER4, p180erbB4 | |
| ERC1 | ELKS/RAB6-interacting/CAST family member 1 | Cast2, ELKS, ERC-1, RAB6IP2 | |
| ERC2 | ELKS/RAB6-interacting/CAST family member 2 | CAST, CAST1, ELKSL, SPBC110, Spc110 | |
| ERCC6 | Excision repair cross-complementation group 6 | ARMD5, CKN2, COFS, COFS1, CSB, RAD26, UVSS1 | |

| | | | |
|----------|--|---|---|
| ERCC6L | Excision repair cross-complementation group 6 like | PICH, RAD26L | |
| EREG | Epiregulin | ER | |
| ERF | Ets2 repressor factor | CRS4, PE-2, PE2 | |
| ERG | v-ets avian erythroblastosis virus E2O | erg-3, p55 | v |
| ERGIC1 | Endoplasmic reticulum-golgi intermediate compartment (ERGIC) 1 | HT034, ERGIC-32, ERGIC32, NET24 | |
| ERI1 | Exoribonuclease 1 | 3'HEXO, HEXO, THEX1 | |
| ERICH1 | Glutamate-rich 1 | HSPC319 | |
| ERLIN1 | ER lipid raft associated 1 | KFTT-5T0M21.1, C100H09, ERM1-1, KEO4, KEO4, SPFH, SPG62 | |
| ERLIN2 | ER lipid raft associated 2 | UNQ2441, C8orf2, Erlin-2, NET32, SPFH2, SPG18 | |
| ERMAP | Erythroblast membrane-associated protein (Science blood group) | BTN5, PRO2801, RD, SC | |
| ERMN | Ermin, ERM-like protein | JN, KIAA1189, ermin | |
| ERO1L | ERO1-like (<i>S. cerevisiae</i>) | UNQ434/PRO865, ERO1-alpha, ERO1AA, ERO1L | |
| ERO1LB | ERO1-like beta (<i>S. cerevisiae</i>) | RP5-985L19.2 | |
| ERP44 | Endoplasmic reticulum protein 44 | UNQ532/PRO1075, PDIA10, TXNDC4 | |
| ERVFRDE1 | Endogenous retrovirus group FRD, member 1 | UNQ0191/PRO20218, ERVFRDE1, GLL0191, HERV-ERD, HERV-W/ERD, UNQ4101, ERD | |
| ESCO2 | Establishment of sister chromatid cohesion 2 | 2410004I17Rik, EFO2, RBS | |
| ESD | Esterase D | RP11-147L20.1, FGH | |
| ESM1 | Endothelial cell-specific molecule 1 | endocan | |
| ESPNL | Espin-like | UNQ3125 | |
| ESR1 | Estrogen receptor 1 | RP1-130E4.1, ER, ESR, ESRA, ESTRR, Era, NR3A1 | |
| ESR2 | Estrogen receptor 2 (ER beta) | ER-BETA, ESR-BETA, ESRB, ESTRB, Erb, NR3A2 | |
| ESRP1 | Epithelial splicing regulatory protein 1 | RBM35A, RMB35A | |
| ESRP2 | Epithelial splicing regulatory protein 2 | PP7059, RBM35B | |
| ESRRG | Estrogen-related receptor gamma | ERR3, ERRgamma, NR3B3 | |
| ESYT3 | Extended synaptotagmin-like protein 3 | CHR3SYT, E-Syt3, FAM62C | |
| ETF1 | Eukaryotic translation termination factor 1 | D5S1995, ERF, ERF1, RF1, SUP45L1, TB3-1 | |
| ETFDH | Erection-transferring-navoprotein 1 | ETFQO, MADD | |
| ETNK1 | Ethanolamine kinase 1 | EKI, EK1, EK11, Nbla10396 | |
| ETS1 | v-ets avian erythroblastosis virus E2O | ETS-1, EWSR2, p54 | |
| ETV1 | Ets variant 1 | ER81 | v |
| ETV3L | Ets variant 3-like | | |
| ETV6 | Ets variant 6 | TEL, TEL/ABL | v |
| EVC | Ellis van Creveld syndrome | DWF-11, EVCL, EVC | |

| | | | |
|---------|---|---|---|
| EVI2A | Ecotropic viral integration site 2A | EVDA, EVI-2A, EVI2 | |
| EVI5 | Ecotropic viral integration site 5 | NB4S | |
| EVL | Enah/Vasp-like | RNB6 | |
| EXD1 | Exonuclease 3'-5' domain containing 1 | EXDL1 | |
| EXO1 | Exonuclease 1 | RP11-553N16.2, HEX1, hExoI | |
| EXOC2 | Exocyst complex component 2 | RP11-164H16.2, SEC5, SEC5L1, Sec5p | |
| EXOC4 | Exocyst complex component 4 | tcag7.1185, SEC8, SEC8L1, Sec8p | |
| EXOC5 | Exocyst complex component 5 | HSEC10, PRO1912, SEC10, SEC10L1, SEC10P | |
| EXOC6 | Exocyst complex component 6 | RP11-346J12.4A, SEC15, SEC15L, SEC15L1, SEC15L3, Sec15p, EXOC6 | |
| EXOC8 | Exocyst complex component 8 | EXO84, Exo84p, SEC84 | |
| EXOSC10 | Exosome component 10 | PM3C1, PM3C1-100, PM3C1L, PM3C1L2, RRP10, Rrp10p, R2p2.2.4 | |
| EXOSC2 | Exosome component 2 | RP11-57C19.4, RRP4, Rrp4p, hRrp4p, p7 | |
| EXOSC3 | Exosome component 3 | CGI-102, FC11B, RRP40, Rrp40p, D45J10.1, mRrp40, p10 | |
| EXOSC6 | Exosome component 6 | EAP4, MTR3, Mtr3p, hMtr3p, p11 | |
| EXPH5 | Exophilin 5 | SLAC2-B, SLAC2B | |
| EXT2 | Exostosin glycosyltransferase 2 | SOTV | √ |
| EXTL2 | Exostosin-like glycosyltransferase 2 | EXTR2 | |
| EXTL3 | Exostosin-like glycosyltransferase 3 | BOTV, EXTL1L, EXTR1, REGR, RPR | |
| EYA1 | EYA transcriptional coactivator and phosphatase 1 | BOP, BOR, BOS1, OFC1 | |
| EYA4 | EYA transcriptional coactivator and phosphatase 4 | RP11-704J17.4, CMD1J, DFNA10 | |
| EYS | Eyes shut homolog (Drosophila) | RP1-22H7.2, COOH178, COOH179, COOH180, EGFL10, ENX-1, ENX1, EZH10, KMT16, KMT16A, WVS3, WVSZ, EZH10 | |
| EZH2 | Enhancer of zeste 2 polycomb repressive complex 2 subunit | ENX-1, ENX1, EZH10, KMT16, KMT16A, WVS3, WVSZ, EZH10 | √ |
| F11 | Coagulation factor XI | FXI | |
| F11R | F11 receptor | RP11-344M22.2, CD521, JAM1, JAM1L, JAMA, JCAM, KAT, DAM1 | |
| F13A1 | Coagulation factor XIII, A1 polypeptide | RP11-232H4.1, F13A | |
| F13B | Coagulation factor XIII, B polypeptide | FXIIIB | |
| F2R | Coagulation factor II (thrombin) receptor | CF2R, HTR, PAR-1, PAR1, TR | |
| F2RL3 | Coagulation factor II (thrombin) receptor-like 3 | PAR4 | |
| F5 | Coagulation factor V (proaccelerin, labile factor) | FVL, PCCF, RPRGL1, THPH2 | |
| FABP2 | Fatty acid binding protein 2, intestinal | FABPI, I-FABP | |
| FABP7 | Fatty acid binding protein 7, brain | RP11-548E19.1, B-FABP, BLBP, FABPB, MRG | |
| FADS1 | Fatty acid desaturase 1 | D5D, FADS6, FADSD5, LLCDL1, TU12 | |
| FADS2 | Fatty acid desaturase 2 | D6D, DES6, FADSD6, LLCDL2, SLL0262, TU13 | |

| | | | |
|-----------|---|--|--|
| FAM1 | Fas apoptotic inhibitory molecule | FAM1 | |
| FAM2 | Fas apoptotic inhibitory molecule 2 | LFG, LFG2, NGP35, NMP35, TMBIM2 | |
| FAM3 | Fas apoptotic inhibitory molecule 3 | FCMR, TOSO | |
| FAM100A | | | |
| FAM100B | | | |
| FAM101B | family with sequence similarity 101, member D | CFM1 | |
| FAM102A | family with sequence similarity 102, member A | RP11-203J24.7, C9orf132, EEIG1, SYM-3A, bA203J24.7 | |
| FAM102B | family with sequence similarity 102, member B | RP11-256E16.1, SYM-3B | |
| FAM104A | family with sequence similarity 104, member A | | |
| FAM104B | family with sequence similarity 104, member B | RP11-266I3.4, CXorf44 | |
| FAM105A | family with sequence similarity 105, member A | NET20 | |
| FAM105B | | | |
| FAM107A | family with sequence similarity 107, member A | DRR1, TU3A | |
| FAM107B | family with sequence similarity 107, member B | RP11-153L18.1, C10orf45 | |
| FAM108B1 | | | |
| FAM108C1 | | | |
| FAM109B | family with sequence similarity 109, member B | CTA-250D10.2, IPIP27B, Ses2 | |
| FAM110B | family with sequence similarity 110, member B | C8orf72 | |
| FAM114A2 | family with sequence similarity 114, member A | 133K02, C5orf3 | |
| FAM115C | family with sequence similarity 115, member C | FAM139A | |
| FAM116A | | | |
| FAM117A | family with sequence similarity 117, member A | | |
| FAM117B | family with sequence similarity 117, member B | ALS2CR13 | |
| FAM118A | family with sequence similarity 118, member A | CTA-268H5.11-003, C22orf8 | |
| FAM118B | family with sequence similarity 118, member B | | |
| FAM119A | | | |
| FAM119B | | | |
| FAM120A | Family with sequence similarity 120A | C9orf10, DNAPTP1, DNAPTP5, OSSA | |
| FAM120AOS | family with sequence similarity 120A opposite strand | RP11-165J3.1, C9orf10OS | |
| FAM120B | Family with sequence similarity 120B | CCPG, KIAA1838, PGCC1, dJ894D12.1 | |
| FAM120C | Family with sequence similarity 120C | RP11-161N3.2, CXorf17, ORF34 | |
| FAM122A | Family with sequence similarity 122A | C9orf42 | |
| FAM122B | Family with sequence similarity 122B | RP11-308B5.5, SPACIA2 | |

| | | | |
|----------|--|------------------------------------|--|
| FAM123B | | | |
| FAM124B | Family with sequence similarity 124B | | |
| FAM125B | | | |
| FAM126B | family with sequence similarity 126, | HYCC2 | |
| FAM129C | family with sequence similarity 129, | BCNP1 | |
| FAM131B | family with sequence similarity 131, | | |
| FAM133A | family with sequence similarity 133, | RP1-32F7.2, CT115 | |
| FAM133B | family with sequence similarity 133, | RP1-32F7.2, CT115 | |
| FAM134C | family with sequence similarity 134, | | |
| FAM135A | family with sequence similarity 135, | RP1-198I9.1, KIAA1411 | |
| FAM135B | family with sequence similarity 135, | RP1-198I9.1, KIAA1411 | |
| FAM13A | family with sequence similarity 13, member A | ARHGAP481, FAM13A | |
| FAM13AOS | | | |
| FAM13B | family with sequence similarity 13, member B | ARHGAP49, C5orf51, KH | |
| FAM149A | family with sequence similarity 149, | AW213256, mKIAA4166 | |
| FAM150A | family with sequence similarity 150, | EG620393 | |
| FAM153B | family with sequence similarity 153, | | |
| FAM153C | family with sequence similarity 153, | NY-REN-7-like | |
| FAM155B | family with sequence similarity 155, | CXorf63, TED, TMEM28, bB57D9.1 | |
| FAM156A | family with sequence similarity 156, | RP1-248F5.1, PRO0659, TMEM29 | |
| FAM156B | family with sequence similarity 156, | PP12994, TMEM29B | |
| FAM159A | family with sequence similarity 159, | UNQ2783/PRO7171, PRO7171, WWLS2783 | |
| FAM160A1 | family with sequence similarity 160, | | |
| FAM160A2 | family with sequence similarity 160, | C11orf56 | |
| FAM163A | family with sequence similarity 163, | RP11-12M5.2, C1orf76, NDSP | |
| FAM164A | family with sequence similarity 164, | C8orf70, ZC2HC1A | |
| FAM167A | family with sequence similarity 167, | C8orf13, D8S265 | |
| FAM168A | family with sequence similarity 168, | KIAA0280, TCRP1 | |
| FAM168B | family with sequence similarity 168, | MANI | |
| FAM169A | family with sequence similarity 169, | SLAP75 | |
| FAM169B | family with sequence similarity 169, | | |
| FAM171A1 | family with sequence similarity 171, | RP11-455B2.10-002, C10orf38 | |
| FAM172A | family with sequence similarity 172, | C5orf21 | |

| | | | |
|----------|---|--|--|
| FAM174A | Family with sequence similarity 174, | UNQ1912/PRO4371, TMEM157, UNQ1912 | |
| FAM175B | Family with sequence similarity 175, | ABRO1, KIAA0157 | |
| FAM177A1 | Family with sequence similarity 177, | C14orf24 | |
| FAM178A | Family with sequence similarity 178, | C10orf6 | |
| FAM179B | Family with sequence similarity 179, | KIAA0423 | |
| FAM182A | Family with sequence similarity 182, | RP13-329D4.5, C20orf91, bB329D4.1 | |
| FAM185A | Family with sequence similarity 185, | | |
| FAM189A1 | Family with sequence similarity 189, | TMEM228 | |
| FAM189B | Family with sequence similarity 189, | C1orf2, COTE1 | |
| FAM18A | Family with sequence similarity 18, member 1 | YDR084C | |
| FAM18B2 | Family with sequence similarity 18, member 2 | | |
| FAM190A | Family with sequence similarity 190, | | |
| FAM190B | Family with sequence similarity 190, | BOS_24114 | |
| FAM192A | Family with sequence similarity 192, | CDA10, C16orf94, CDA018, NIP30 | |
| FAM193A | Family with sequence similarity 193, member 1 | RES4-22, C4orf8 | |
| FAM195A | Family with sequence similarity 195, member 1 | C16orf14, c349E10.1 | |
| FAM198A | Family with sequence similarity 198, member 1 | C3orf41 | |
| FAM198B | Family with sequence similarity 198, member 2 | AD021, AD036, C4orf18 | |
| FAM19A2 | Family with sequence similarity 19-like 2 | TAFA-2, TAFA2 | |
| FAM19A3 | Family with sequence similarity 19-like 3 | RP11-426L16.6, TAFA-3, TAFA3 | |
| FAM20B | Family with sequence similarity 20, member 1 | RP11-177A2.1, gxk1 | |
| FAM22D | Family with sequence similarity 22, member 1 | | |
| FAM22G | Family with sequence similarity 22, member 2 | | |
| FAM23A | Family with sequence similarity 23, member 1 | bA16O1.2 | |
| FAM23B | Family with sequence similarity 23, member 2 | bA16I21.2 | |
| FAM24A | Family with sequence similarity 24, member 1 | | |
| FAM26D | Family with sequence similarity 26, member 1 | RP3-493F7.4, C6orf78 | |
| FAM26E | Family with sequence similarity 26, member 2 | RP3-493F7.3, C6orf188, dJ493F7.3 | |
| FAM27L | Family with sequence similarity 27-like | | |
| FAM35B | Family with sequence similarity 35, member 1 | | |
| FAM35B2 | Family with sequence similarity 35, member 2 | | |
| FAM38B | Family with sequence similarity 38, member 1 | | |
| FAM3B | Family with sequence similarity 3, member 1 | PRED44, 2-21, C21orf11, C21orf76, ORF9, PANDER | |

| | | | |
|----------|--|-----------------------------------|---|
| FAM3C | Family with sequence similarity 3, member 1 | GS3786, ILEI | |
| FAM3D | Family with sequence similarity 3, member 2 | UNQ567/PRO1130, EF7, OIT1 | |
| FAM40B | Family with sequence similarity 40, member 1 | STRIP2 | |
| FAM41AY2 | Family with sequence similarity 41, member 2 | | |
| FAM43A | Family with sequence similarity 43, member 1 | PP7298 | |
| FAM45A | Family with sequence similarity 45, member 1 | | |
| FAM46A | Family with sequence similarity 46, member 1 | RP1-300G12.3, C6orf37, XTP11 | |
| FAM46B | Family with sequence similarity 46, member 2 | RP11-344H11.8 | |
| FAM46C | Family with sequence similarity 46, member 3 | | v |
| FAM46D | Family with sequence similarity 46, member 4 | CT1.26, CT112 | |
| FAM47B | Family with sequence similarity 47, member 1 | RP13-520K9.1 | |
| FAM47C | Family with sequence similarity 47, member 2 | RP11-31H15.5 | |
| FAM47E | Family with sequence similarity 47, member 4 | hCG_23000 | |
| FAM48A | Family with sequence similarity 48, member 1 | BOS_12357 | |
| FAM53B | Family with sequence similarity 53, member 1 | RP11-12J10.2, KIAA0140, bA12J10.2 | |
| FAM54B | Family with sequence similarity 54, member 1 | | |
| FAM55C | Family with sequence similarity 55, member 1 | EGK_11249 | |
| FAM57B | Family with sequence similarity 57, member 1 | FP1188 | |
| FAM58A | Family with sequence similarity 58, member 1 | STAR | |
| FAM59A | Family with sequence similarity 59, member 1 | | |
| FAM5B | Family with sequence similarity 5, member 1 | EGK_01993 | |
| FAM5C | Family with sequence similarity 5, member 2 | BOS_15614 | |
| FAM63A | Family with sequence similarity 63, member 1 | RP11-316M1.5 | |
| FAM63B | Family with sequence similarity 63, member 2 | | |
| FAM66C | Family with sequence similarity 66, member 1 | | |
| FAM66D | Family with sequence similarity 66, member 2 | | |
| FAM66E | Family with sequence similarity 66, member 3 | | |
| FAM70A | Family with sequence similarity 70, member 1 | EGK_20885 | |
| FAM71C | Family with sequence similarity 71, member 1 | | |
| FAM71D | Family with sequence similarity 71, member 2 | C14orf54 | |
| FAM71E2 | Family with sequence similarity 71, member 3 | C19orf16 | |
| FAM71F1 | Family with sequence similarity 71, member 4 | FAM137A, NYD-SP18 | |
| FAM72D | Family with sequence similarity 72, member 1 | WI2-929E21.1, GCU2 | |

| | | | |
|---------|--|--|---|
| FAM73A | Family with sequence similarity 73, member 1 | | |
| FAM73B | Family with sequence similarity 73, member 2 | RP11-167N5.1, C9orf54 | |
| FAM76A | Family with sequence similarity 76, member 1 | RP3-426I6.1 | |
| FAM76B | Family with sequence similarity 76, member 2 | | |
| FAM81A | Family with sequence similarity 81, member 1 | | |
| FAM81B | Family with sequence similarity 81, member 2 | | |
| FAM82B | Family with sequence similarity 82, member 2 | | |
| FAM84A | Family with sequence similarity 84, member 1 | NSE1, PP11517 | |
| FAM85A | Family with sequence similarity 85, member 1 | | |
| FAM86A | Family with sequence similarity 86, member 1 | SB153 | |
| FAM86B1 | Family with sequence similarity 86, member 1 | | |
| FAM86B2 | Family with sequence similarity 86, member 2 | | |
| FAM86C | Family with sequence similarity 86, member 3 | FAM86C | |
| FAM86D | Family with sequence similarity 86, member 4 | | |
| FAM89A | Family with sequence similarity 89, member 1 | RP11-423F24.2, C1orf153 | |
| FAM90A1 | Family with sequence similarity 90, member 1 | | |
| FAM91A1 | Family with sequence similarity 91, member 1 | | |
| FAM91A2 | Family with sequence similarity 91, member 2 | | |
| FAM95B1 | Family with sequence similarity 95, member 1 | RP11-146D12.4 | |
| FAM96A | Family with sequence similarity 96, member 1 | | |
| FAM99A | Family with sequence similarity 99, member 1 | | |
| FAM9C | Family with sequence similarity 9, member 1 | TEX39C | |
| FANCA | Fanconi anemia, complementation group A | FA, FA-H, FA1, FAA, FACA, FAH, FANCH | √ |
| FANCD2 | Fanconi anemia, complementation group D2 | FA-D2, FA4, FACD, FAD, FAD2, FANCD | √ |
| FANCF | Fanconi anemia, complementation group F | FAF | √ |
| FANCG | Fanconi anemia, complementation group G | FAG, XRCC9 | √ |
| FANCI | Fanconi anemia, complementation group I | KIAA1794 | |
| FANCM | Fanconi anemia, complementation group M | FAAP250, KIAA1596 | |
| FAR1 | Fatty acyl CoA reductase 1 | UNQ2423/PRO4981, MLSTD2, SDR10E1 | |
| FAS | Fas cell surface death receptor | RP11-399O19.7, ALPS1A, APO-1, APT1, CD95, FASL, TNFRSF6, FAS | √ |
| FASLG | Fas ligand (TNF superfamily, member 6) | FASL, TNFSF6, APTL, CD178, CD95L, CD95L, FASL, TNFSF6 | |
| FASTKD1 | FAST kinase domains 1 | | |
| FASTKD2 | FAST kinase domains 2 | KIAA0971 | |

| | | | |
|---------|--|--|---|
| FASTKD5 | FAST kinase domains 5 | dJ1187M17.5 | |
| FAT3 | FAT atypical cadherin 3 | CDHF15, CDHR10 | |
| FAU | Pinker-Diskis-Kenny murine sarcoma virus (FPB-MuSV) ubiquitously expressed | FAU1, Fub1, Fubi, MNSFbeta, RPS30, S30, asr1 | |
| FBLIM1 | Filamin binding LIM protein 1 | RP11-169K16.5, CAL, FBLP-1, FBLP1 | |
| FBLN1 | Fibulin 1 | CTA-941F9.7, FBLN, FIBL1 | |
| FBLN5 | Fibulin 5 | UNQ1847/KROZ10, ADCLZ, ANCLTA, ANMDS, RANGLD, ECTOET, FBN, OFH1SDZ, MASS, MFS1, OCTD, SCS, SSKS, WMS, WMS2 | |
| FBN1 | Fibrillin 1 | | |
| FBN2 | Fibrillin 2 | CCA, DA9 | |
| FBXL14 | F-box and leucine-rich repeat protein 14 | Fbl14 | |
| FBXL17 | F-box and leucine-rich repeat protein 17 | FBXO13, Fbl17, Fbx13 | |
| FBXL20 | F-box and leucine-rich repeat protein 20 | RP11-690G19.3, Fbl2, Fbl20 | |
| FBXL21 | F-box and leucine-rich repeat protein 21 | FBL3B, FBXL3B, FBXL3P, Fbl21 | |
| FBXL3 | F-box and leucine-rich repeat protein 3 | FBL3, FBL3AA, FBXL3 | |
| FBXL5 | F-box and leucine-rich repeat protein 5 | FBL4, FBL5, FLR1 | |
| FBXO11 | F-box protein 11 | UG063H01, FBX11, PRMT9, UBR6, VIT1 | v |
| FBXO2 | F-box protein 2 | FBG1, FBX2, Fbs1, NFB42, OCP1 | |
| FBXO21 | F-box protein 21 | FBX21 | |
| FBXO22 | F-box protein 22 | FBX22, FISTC1 | |
| FBXO24 | F-box protein 24 | FBX24 | |
| FBXO25 | F-box protein 25 | FBX25 | |
| FBXO28 | F-box protein 28 | CENP-30, Fbx28 | |
| FBXO3 | F-box protein 3 | FBA, FBX3 | |
| FBXO30 | F-box protein 30 | RP11-545I5.4, Fbx30 | |
| FBXO31 | F-box protein 31 | PP2386, FBX14, FBXO14, Fbx31, pp2386 | |
| FBXO32 | F-box protein 32 | Fbx32, MAFbx | |
| FBXO33 | F-box protein 33 | BMND12, Fbx33, c14_5247 | |
| FBXO34 | F-box protein 34 | CGI-301, Fbx34 | |
| FBXO36 | F-box protein 36 | Fbx36 | |
| FBXO39 | F-box protein 39 | CT144, Fbx39 | |
| FBXO40 | F-box protein 40 | FBX40 | |
| FBXO41 | F-box protein 41 | FBX41 | |
| FBXO42 | F-box protein 42 | Fbx42, JFK | |
| FBXO43 | F-box protein 43 | 4930533G20Rik, Emi2 | |

| | | | |
|--------|---|--|---|
| FBXO45 | F-box protein 45 | Fbx45 | |
| FBXO47 | F-box protein 47 | | |
| FBXO5 | F-box protein 5 | RP1-101K10.5, EMI1, FBX5, Fbxo31 | |
| FBXO7 | F-box protein 7 | LLZZNC03-28119.2, FBA, FBA07, FBA7, FARK15, FKPS | |
| FBXW11 | F-box and WD repeat domain containing 11 | BTRC2, BTRCP2, FBW1B, FBXW1B, Fbw11, Hos | |
| FBXW2 | F-box and WD repeat domain containing 2 | RP11-88M19.2, FBW2, Fwd2, Md6 | |
| FBXW7 | F-box and WD repeat domain containing 7 | AGO, CDC4, FBW6, FBW7, FBX30, FBXO30, FBXW0, SEL10, SEL10-1A, SEL10-4 | √ |
| FCAMR | Fc receptor, IgA, IgM, high affinity | FKSG87, CD351, FCA/MR | |
| FCGR1A | Fc fragment of IgG, high affinity Ia, receptor (CD64) | RP11-196G18.2, CD64, CD64A, FCRI, IGFR1 | |
| FCGR3A | Fc fragment of IgG, low affinity IIIa, receptor (CD16) | RP11-5K25.1, CD16, CD16A, FCG3, FCGR3, FCGR3L | |
| FCGR3B | Fc fragment of IgG, low affinity IIIb, receptor (CD16b) | RP11-25K21.3, CD16, CD16B, FCG3, FCGR3, FCRT10, FCRIII, FCRIII1 | |
| FCGRT | Fc fragment of IgG, receptor, transporter, alpha | FCRN, alpha-chain | |
| FCRL2 | Fc receptor-like 2 | RP11-50757.0, CD307b, FCRL2, HGF4, IRTA4, STAF1, SPAD1A, SPAD1B, SPAD1C | |
| FCRL4 | Fc receptor-like 4 | CD307d, FCRH4, IGFP2, IRTA1 | |
| FCRL5 | Fc receptor-like 5 | RP11-217A12.1, DAMA51, CD307f, CD307e, FCRL5, IRTA2, RP0830 | |
| FCRLA | Fc receptor-like A | FCRL4, FCRL4-1, FCRL4-2, FCRL4-3 | |
| FDFT1 | farnesyl-diphosphate farnesyltransferase 1 | DGPT, ERG9, SQS, SS | |
| FDX1 | Ferredoxin 1 | ADX, FDX, LOH11CR1D | |
| FECH | Ferrochelatase | EPP, FCE | |
| FER | Fer (fps/fes related) tyrosine kinase | FER1, FER1K/4, FER1E10, FER1E13, FER1E5, FER1E6, FER2 | |
| FER1L4 | Fer-1-like family member 4, pseudogene (functional) | RP3-477O4.7, C20orf124 | |
| FERMT1 | Fermitin family member 1 | RP3-1050H1.1, C20orf42, DTCC02, KIND1, UNCT12A, UDD1 | |
| FES | FES proto-oncogene, tyrosine kinase | FPS | |
| FEZ1 | Fasciculation and elongation protein zeta 1 (avian D) | | |
| FGA | Fibrinogen alpha chain | Fib2 | |
| FGD3 | FYVE, KNOX1 and FY domain containing 3 | RP11-274J16.4, ZFYVE5 | |
| FGD4 | FYVE, KNOX1 and FY domain containing 4 | CMT4H, FRABP, ZFYVE6 | |
| FGF1 | Fibroblast growth factor 1 (acidic) | AFGF, EGF1, EGF-0cta, EGF0A, EGF0B, FGF-1, FGF-1b, FGF1, GLI0702, HGF1, HGF1 | |
| FGF12 | Fibroblast growth factor 12 | FGF12B, FHF1 | |
| FGF2 | Fibroblast growth factor 2 (basic) | BFGF, FGF-2, FGFB, HBGF-2 | |
| FGF7 | Fibroblast growth factor 7 | HBGF-7, KGF | |
| FGF9 | Fibroblast growth factor 9 | FGF-9, GAF, HBFG-9, HBGF- | |
| FGFR1 | Fibroblast growth factor receptor 1 | BTGFR, CD331, CLK, FGFBR, FGFRT, FGF-2, FLT2, HGF1, HGF2, HGF3, HGF4, HGF5, KAL2, NCSAM, OGD | √ |

| | | | |
|----------|---|---|---|
| FGFR1OP | FGFR1 oncogene partner | FOP | √ |
| FGFR1OP2 | FGFR1 oncogene partner 2 | HSPC123, HSPC123-like, WIT3.0 | |
| FGFR2 | Fibroblast growth factor receptor 2 | BBDS, BLK, BTK-1, CD332, CEK3, CDT1, ECT1, JWS, K SAM, KGER, TK14, TK25 | √ |
| FGFR3 | Fibroblast growth factor receptor 3 | ACH, CD333, CEK2, HSFGFR3EX, JTK4 | √ |
| FGL2 | Fibrinogen-like 2 | T49, pT49 | |
| FHAD1 | Forkhead-associated (FHA) phosphopeptide binding domain 1 | RP3-467K16.1 | |
| FHDC1 | FH2 domain containing 1 | | |
| FHL3 | Four and a half LIM domains 3 | SLIM2 | |
| FHL5 | Four and a half LIM domains 5 | RP3-393D12.2, ACT, dJ393D12.2 | |
| FHOD3 | Formin homology 2 domain containing 3 | FHOS2, Formactin2 | |
| FIBCD1 | Fibrinogen C domain containing 1 | RP11-83J21.2 | |
| FIGN | Fidgetin | RP23-312N5.1, fi, fidget | |
| FIGNL1 | Fidgetin-like 1 | | |
| FIGNL2 | Fidgetin-like 2 | | |
| FIP1L1 | Factor interacting with PAPOLA and CPSF1 | FIP1, Rhe, hFip1 | √ |
| FIZ1 | FLT3-interacting zinc finger 1 | ZNF798 | |
| FKBP11 | FK506 binding protein 11, 19 kDa | UNQ336/PRO535, FKBP19 | |
| FKBP1A | FK506 binding protein 1A, 12 kDa | FKBP11-1, FKBP12, FKBP13, FKBP14, FKBP15, FKBP16, FKBP17, FKBP18, FKBP19, FKBP20, FKBP21, FKBP22, FKBP23, FKBP24, FKBP25, FKBP26, FKBP27, FKBP28, FKBP29, FKBP30, FKBP31, FKBP32, FKBP33, FKBP34, FKBP35, FKBP36, FKBP37, FKBP38, FKBP39, FKBP40, FKBP41, FKBP42, FKBP43, FKBP44, FKBP45, FKBP46, FKBP47, FKBP48, FKBP49, FKBP50, FKBP51, FKBP52, FKBP53, FKBP54, FKBP55, FKBP56, FKBP57, FKBP58, FKBP59, FKBP60, FKBP61, FKBP62, FKBP63, FKBP64, FKBP65, FKBP66, FKBP67, FKBP68, FKBP69, FKBP70, FKBP71, FKBP72, FKBP73, FKBP74, FKBP75, FKBP76, FKBP77, FKBP78, FKBP79, FKBP80, FKBP81, FKBP82, FKBP83, FKBP84, FKBP85, FKBP86, FKBP87, FKBP88, FKBP89, FKBP90, FKBP91, FKBP92, FKBP93, FKBP94, FKBP95, FKBP96, FKBP97, FKBP98, FKBP99, FKBP100 | |
| FKBP4 | FK506 binding protein 4, 59 kDa | FKBP51, FKBP52, FKBP59, HBI | |
| FKBP5 | FK506 binding protein 5 | FKBP51, FKBP52, FKBP59, HBI | |
| FKBP6 | FK506 binding protein 6, 36 kDa | FKBP36 | |
| FKBP7 | FK506 binding protein 7 | RP23-468L22.3, 23kDa, FKBP-7, FKBP23 | |
| FKSG83 | | | |
| FKTN | Fukutin | RP11-235C23.1, CMD1X, FCMD, LGMD2M, MDDGA4 | |
| FLG2 | Filaggrin family member 2 | RP1-14N1.3, IFPS | |
| FLI1 | Flt-1 proto-oncogene, ETS transcription factor | EWSR2, SIC-1 | √ |
| FLII | Flightless I homolog (Drosophila) | FLI, FLIL, Fli1 | |
| FLJ10038 | Uncharacterized protein FLJ10038 | | |
| FLJ10213 | | | |
| FLJ10357 | | | |
| FLJ10489 | | | |
| FLJ12825 | Uncharacterized LOC440101 | | |
| FLJ16124 | FLJ16124 protein | | |

| | | | |
|----------|---|--|--|
| FLJ22763 | Uncharacterized LOC401081 | | |
| FLJ23152 | | | |
| FLJ26245 | Uncharacterized LOC400533 | | |
| FLJ26850 | FLJ26850 protein | | |
| FLJ30838 | | | |
| FLJ31104 | Uncharacterized LOC441072 | | |
| FLJ32063 | | | |
| FLJ32742 | Uncharacterized locus FLJ32742 | | |
| FLJ34503 | Uncharacterized FLJ34503 | | |
| FLJ35220 | | | |
| FLJ36000 | Uncharacterized FLJ36000 | | |
| FLJ37798 | | | |
| FLJ38028 | | | |
| FLJ39061 | Uncharacterized protein FLJ39061 | | |
| FLJ39080 | Uncharacterized LOC441355 | | |
| FLJ39582 | Hypothetical protein FLJ39582 | | |
| FLJ39653 | Hncharacterized protein FLJ39653 | | |
| FLJ40194 | Hncharacterized FLJ40194 | | |
| FLJ40288 | Hncharacterized FLJ40288 | | |
| FLJ40330 | | | |
| FLJ40448 | | | |
| FLJ41278 | Uncharacterized LOC400046 | | |
| FLJ41309 | | | |
| FLJ41423 | Putative uncharacterized protein FLJ41423 | | |
| FLJ41484 | | | |
| FLJ42200 | FLJ42200 protein | | |
| FLJ42280 | | | |
| FLJ42393 | Uncharacterized LOC401105 | | |
| FLJ42627 | Uncharacterized LOC645644 | | |
| FLJ42842 | | | |
| FLJ42953 | | | |
| FLJ43315 | Asparagine synthetase pseudogene | | |
| FLJ43390 | | | |

| | | | |
|----------|--|--|---|
| FLJ43950 | | | |
| FLJ43963 | | | |
| FLJ44054 | | | |
| FLJ44082 | | | |
| FLJ44313 | FLJ44313 protein | | |
| FLJ44790 | Uncharacterized FLJ44790 | | |
| FLJ44838 | Uncharacterized LOC644767 | | |
| FLJ44881 | | | |
| FLJ45244 | | | |
| FLJ45949 | | | |
| FLJ77644 | | | |
| FLJ90757 | | | |
| FLNC | Filamin C, gamma | ADI-280, ADI280A, ADI A, ADI L, FLN2, MITMD, MDD4 | |
| FLOT2 | Flotillin 2 | ECS-1, ECS1, ESA, ESA1, M17S1 | |
| FLRT2 | Fibronectin leucine rich transmembrane protein 2 | | |
| FLT1 | Fms-related tyrosine kinase 1 | FLT, FLT-1, VEGFR-1, VEGFR1 | |
| FLT3 | Fms-related tyrosine kinase 3 | RP11-153M24.3, CD135, FLK-2, FLK2, STK1 | v |
| FLT3LG | Fms-related tyrosine kinase 3 ligand | FL, FLT3L | |
| FLT4 | Fms-related tyrosine kinase 4 | FLT41, LMPH1A, PCL, VEGFR3 | |
| FMN1 | Formin 1 | FMN, LD | |
| FMN2 | Formin 2 | RP11-90L13.1 | |
| FMNL2 | Formin-like 2 | FHOD2 | |
| FMNL3 | Formin-like 3 | FHOD3, WBP-3, WBP3 | |
| FMO2 | Flavin containing monooxygenase 2 (non-functional) | FMO1B1 | |
| FMO5 | Flavin containing monooxygenase 5 | RP11-337C18.2 | |
| FMR1 | Fragile X mental retardation 1 | FMRP, FRAXA, POF, POF1 | |
| FN3K | Fructosamine 3 kinase | | |
| FN3KRP | Fructosamine 3 kinase related protein | FN3KL | |
| FNBP1 | Formin binding protein 1 | FBP17 | v |
| FNBP4 | Formin binding protein 4 | FBP30 | |
| FNDC3A | Fibronectin type III domain containing 3A | RP11-205H6.5, FNDC3, HUGO, OA205H6.1, UNQ2421/FR04719/FR054274, FAD104, FR04719, VV/TM2421 | |
| FNDC3B | Fibronectin type III domain containing 3B | | |
| FNDC5 | Fibronectin type III domain containing 5 | FRCP2, irisin | |

| | | | |
|--------|---|---|---|
| FNDC7 | Fibronectin type III domain containing 7 | RP11-293A10.2 | |
| FNIP1 | Folliculin interacting protein 1 | | |
| FNIP2 | Folliculin interacting protein 2 | FNIP1, MAPO1 | |
| FOLH1 | Folate hydrolase (prostate-specific membrane antigen) 1 | GIG27, FOLH1, FOLH2, GCF2, GCF11, NAALAD1, GIG26, FOLH2, DSM, DSM1, GCF5, GCF11, FSM, FSM1-LIKE, DSM1 | |
| FOLH1B | Folate hydrolase 1B | | |
| FOS | | | |
| FOSB | FBJ murine osteosarcoma viral oncogene homolog B | AP-1, G0S3, GOS3, GOSB | |
| FOXD3 | Forkhead box D3 | AIS1, Genesis, HFH2, VAMAS2 | |
| FOXF1 | Forkhead box F1 | ACDMPV, FKHL5, FREAC1 | |
| FOXG1 | Forkhead box G1 | DT1, DT2, FKH13, FKH12, FKH11, FKH12, FKH13, FKH14, FOXC1B, FOXC1C, HFE1, HFE2, HFE3 | |
| FOXJ2 | Forkhead box J2 | FHX | |
| FOXJ3 | Forkhead box J3 | | |
| FOXK1 | Forkhead box K1 | FOXK1L | |
| FOXK2 | Forkhead box K2 | ILF, ILF-1, ILF1 | |
| FOXL1 | Forkhead box L1 | FKH6, FKHL11, FREAC7 | |
| FOXN2 | Forkhead box N2 | HTLF | |
| FOXN3 | Forkhead box N3 | C14orf116, CHES1, PRO1635 | |
| FOXO3 | Forkhead box O3 | AF6q21, FKHRL1, FKHRL1P2, FOXO2A, FOXO3 | |
| FOXP1 | Forkhead box P1 | HSPC215, 12CC4, QRF1, hFKH1B | v |
| FOXP2 | Forkhead box P2 | CAGH44, SPCH1, TNRC10 | |
| FPGT | Fucose-1-phosphate guanylyltransferase | GFPP | |
| FPR2 | Formyl peptide receptor 2 | ALX1, FFM1-R-11, FFM1-A, FFM1, FFM2, FFM1, FMC2, FMC1A, FPR2 | |
| FPR3 | Formyl peptide receptor 3 | FMC2, FMC1A, FPR2, FFM1, FFM2, FFM1, FFM2, FFM1, FFM2, FFM1 | |
| FRAS1 | Fraser extracellular matrix complex subunit 1 | | |
| FRAT2 | Frequently rearranged in advanced T-cell lymphomas 2 | RP11-452K12.2 | |
| FREM2 | FRAS1 related extracellular matrix protein 2 | | |
| FRG2 | FSHD region gene 2 | FRG2A | |
| FRMD4A | FERM domain containing 4A | RP11-397C18.4, FRMD4, bA295P9.4 | |
| FRMD6 | FERM domain containing 6 | C14orf31, EX1, Willin, c14_5320 | |
| FRMD7 | FERM domain containing 7 | RP6-213H19.2, NYS, NYS1, XIPAN | |
| FRMD8 | FERM domain containing 8 | FKSG44 | |
| FRMPD4 | FERM and PDZ domain containing 4 | PDZD10, PDZK10 | |
| FRRS1 | Ferric-chelate reductase 1 | SDFR2, SDR2 | |

| | | | |
|--------|---|---|---|
| FRS2 | Fibroblast growth factor receptor substrate 2 | FRS2Aalpha, SNT, SNT-1, SNT1, FRS2 | |
| FRS3 | Fibroblast growth factor receptor substrate 3 | RP11-276J23.2, FRS2-beta, FRS2D, FRS2beta, SNT-2, SNT3 | |
| FRY | Furry homolog (Drosophila) | RP11-37E23.0, FCDNA73, Z14K23.2, C130H14, CC002, LA207N4.2, LA27E22.1 | |
| FRYL | FRY-like | KIAA0826 | |
| FSD1L | Fibronectin type III and SPRY domain containing 1-like | RP11-255C23.3, CCDC10, CSDC1D1, FSD1CL, FSD1NL, MIR1 | |
| FSHR | Follicle stimulating hormone receptor | FSHRO, LGR1, ODG1 | |
| FSIP2 | Fibrous sheath interacting protein 2 | hCG_1799183 | |
| FSTL1 | Follistatin-like 1 | FRP, FSL1, MIR198 | |
| FSTL3 | Follistatin-like 3 (secreted glycoprotein) | UNQ674/PRO1308, FLRG, FSRP | √ |
| FSTL4 | Follistatin-like 4 | | |
| FSTL5 | Follistatin-like 5 | | |
| FTLP10 | Ferritin, light polypeptide pseudogene 10 | | |
| FTO | Fat mass and obesity associated | ALKBH9 | |
| FTSJD1 | | | |
| FTSJD2 | | | |
| FUBP3 | Far upstream element (FUSE) binding protein 3 | RP11-57C19.3, FBP3 | |
| FUCA1 | Fucosidase, alpha-L- 1, tissue | RP11-45G17.1, FUCA | |
| FUK | Fucokinase | UNQ5838, 1110046B12Rik | |
| FUS | FUS RNA binding protein | ALS6, ETM41, HNRNPP2, POMP75, TLS, FUS | √ |
| FUT1 | fucosyltransferase 1 (galactoside 2-alpha-L-fucosyltransferase) | H, HH, HSC | |
| FUT10 | fucosyltransferase 10 (alpha(1-3)) | | |
| FUT4 | fucosyltransferase 4 (alpha(1,3)) | CD15, ELFT, FCT3A, FUC-TIV, FUTIV, LeX, SSEA-1 | |
| FUT5 | fucosyltransferase 5 (alpha(1,3)) | FUC-TV | |
| FUT9 | fucosyltransferase 9 (alpha(1,3)) | Fuc-TIX | |
| FUZ | Fuzzy planar cell polarity protein | FY, NTD | |
| FXC1 | | | |
| FXN | Frataxin | CyaY, FA, FARR, FRDA, X25 | |
| FXYD6 | FXYD domain containing ion transport regulator 6 | UNQ521/PRO1056 | |
| FYB | FYN binding protein | ADAP, PRO0823, SLAP-130 | |
| FYTTD1 | Forty-two-three domain containing 1 | UIF | |
| FZD4 | Frizzled class receptor 4 | CD344, EVK1, FEVK3, FZ4, FZ4, FZL4, GPCR, MFZ4, FZM4 | |
| G2E3 | G2/M-phase specific E3 ubiquitin protein ligase 3 | KIAA1333, PHF7B | |
| G3BP1 | GTPase activating protein (SH3 domain) binding protein 1 | G3BP, HDH-VIII | |

| | | | |
|-----------|--|---|--|
| G3BP2 | GTPase activating protein (SH3 domain) binding protein 2 | | |
| GAB1 | GRB2-associated binding protein 1 | | |
| GAB2 | GRB2-associated binding protein 2 | | |
| GAB3 | GRB2-associated binding protein 3 | | |
| GABARAPL2 | GABA(A) receptor-associated protein-like 2 | ATG8, ATG8C, GATE-16, GATE16, GEF-2, GEF2 | |
| GABBR2 | Gamma-aminobutyric acid (GABA) B receptor binding protein transcription factor, beta | GABABR2, GPR51, GPRC3B, HG20, HRIHFB2099 | |
| GABPB1 | Gamma-aminobutyric acid (GABA) A receptor binding protein transcription factor, beta | GABPB1, GABPB2, NBE2B1, NBE2B2 | |
| GABRA1 | Gamma-aminobutyric acid (GABA) A receptor subunit 1 | ECA4, EIEE19, EJM, EJM5 | |
| GABRA2 | Gamma-aminobutyric acid (GABA) A receptor subunit 2 | | |
| GABRA4 | Gamma-aminobutyric acid (GABA) A receptor subunit 4 | | |
| GABRA5 | Gamma-aminobutyric acid (GABA) A receptor subunit 5 | | |
| GABRB2 | Gamma-aminobutyric acid (GABA) B receptor subunit 2 | | |
| GABRB3 | Gamma-aminobutyric acid (GABA) B receptor subunit 3 | ECA5 | |
| GABRG1 | Gamma-aminobutyric acid (GABA) A receptor subunit 1, gamma | | |
| GABRG2 | Gamma-aminobutyric acid (GABA) A receptor subunit 2, gamma | CAE2, ECA2, GEFSP3 | |
| GAD2 | Glutamate decarboxylase 2 (pancreatic islets) | RP11-420F12.2, GAD65 | |
| GADD45A | Growth arrest and DNA-damage-inducible, alpha | RP5-975D15.1, DDIT1, GADD45 | |
| GADL1 | Glutamate decarboxylase-like 1 | ADC, CSADC, HuADC, HuCSADC | |
| GAL3ST1 | Galactose-3-O-sulfotransferase 1 | CST | |
| GAL3ST3 | Galactose-3-O-sulfotransferase 3 | GAL3ST-3, GAL3ST2 | |
| GAL3ST4 | Galactose-3-O-sulfotransferase 4 | PP6968, GAL3ST-4 | |
| GALK2 | Galactokinase 2 | GK2 | |
| GALNT1 | N-glycosyltransferase 1 | GALNAC-T1 | |
| GALNT10 | N-glycosyltransferase 10 | GALNACT10, PPGALNACT10, PPGANTASE10 | |
| GALNT11 | N-glycosyltransferase 11 | tcag7.1057, GALNACT11 | |
| GALNT12 | N-glycosyltransferase 12 | CRCS1, GalNAc-T12 | |
| GALNT2 | N-glycosyltransferase 2 | RP5-956O18.1, GalNAc-T2 | |
| GALNT3 | N-glycosyltransferase 3 | GalNAc-T3, HFTC, HHS | |
| GALNT4 | N-glycosyltransferase 4 | GALNAC-T4, GALNACT4 | |
| GALNT5 | N-glycosyltransferase 5 | GALNAC-T5, GALNACT5 | |
| GALNT7 | N-glycosyltransferase 7 | GALNAC-T7, GalNAcT7 | |
| GALNTL1 | | | |
| GALNTL2 | | | |

| | | | |
|---------|---|--|---|
| GALNTL5 | | | |
| GALP | Galanin-like peptide | | |
| GAN | Gigaxonin | GAN1, KLHL16 | |
| GANC | Glucosidase, alpha; neutral C | | |
| GAPT | GAB2-binding adaptor protein, | C5orf29 | |
| GAPVD1 | GTPase activating protein and v-src domains 1 | RP11-184B22.1, GAPEX5, GAPex-5, RAP6 | |
| GAR1 | GAR1 ribonucleoprotein | NOLA1 | |
| GAS1 | Growth arrest-specific 1 | | |
| GAS2L1 | Growth arrest-specific 2 like 1 | GAR22 | |
| GAS7 | Growth arrest-specific 7 | MLL/GAS7 | √ |
| GAS8 | Growth arrest-specific 8 | GAS11 | |
| GATA2 | GATA binding protein 2 | DCML, IMD21, MONOMAC, NFE1B | √ |
| GATA6 | GATA binding protein 6 | | |
| GATAD2A | GATA zinc finger domain containing 2A | p66alpha | |
| GATAD2B | GATA zinc finger domain containing 2B | RP11-216N14.6, MRD18, P66beta, p68 | |
| GATM | Glycine aminotransferase (L- aminioacetone amidio-transferase) | AGAT, AT, CCDS3 | |
| GATS | GATS, stromal antigen 3 opposite strand | tcag7.1177, STAG3OS | |
| GBA2 | Glucosidase, beta (bile acid) 2 | AD035, SPG46 | |
| GBA3 | Glucosidase, beta (bile acid) 3 | CBG, CBGL1, GLUC, KLRP | |
| GBAS | Glioblastoma amplified sequence | NIPSNAP2 | |
| GBF1 | Goigi brefeldin A resistant guanine | ARF1GEF | |
| GBP1 | Guanylate binding protein 1, interferon- inducible | | |
| GBP2 | Guanylate binding protein 2, interferon- inducible | | |
| GBP4 | Guanylate binding protein 4 | Mpa2 | |
| GBP6 | Guanylate binding protein 6 | | |
| GCA | Grancalcin, EF-hand calcium binding protein | GCL | |
| GCAT | Glycine C-acetyltransferase | KBL | |
| GCC2 | GRIP and coiled-coil domain containing 2 | GCC185, RANBP2L4, REN53 | |
| GCFC1 | | | |
| GCH1 | GTP cyclohydrolase 1 | DYH14, DYH5, DYH5a, GCH1, GTP-CH-1, GTPCH1, HBAH14B | |
| GCLC | Glutamate-cysteine ligase, catalytic subunit | GCL, GCS, GLCL, GLCLC | |
| GCLM | Glutamate-cysteine ligase, modifier subunit | RP4-561L24.2, GLCLR | |
| GCM1 | Glial cells missing homolog 1 (Drosophila) | GCMA, hGCMa | |

| | | | |
|--------|---|--|--|
| GCN1L1 | GCN1 general control of amino-acid | GCN1, GCN1L, PRIC295 | |
| GCNT1 | Glucosaminyl (N-acetyl) transferase 1, core | NP11-214N10.1, CZGN1, CZGN1-L, CZGN1T, GGN1, | |
| GCNT2 | Glucosaminyl (N-acetyl) transferase 2, 1- | NP11-421M1.1, CCA1, CTRCT15C, GCNT3, IGNT, II, | |
| GCOM1 | branching enzyme (Hlood group) | NACCT1, NACCT1, ILG2, KA369010.2, KA421M1.1 | |
| GCOM1 | GRINL1A complex locus 1 | GRINL1A, Gcom2, MYZAP, MYZAP-POLR2M, gcom | |
| GDA | Guanine deaminase | RP11-63P12.1, CYPIN, GUANASE, NEDASIN | |
| GDAP1 | Ganglioside induced differentiation | CMT4, CMT4A, CMTRIA | |
| GDAP2 | Ganglioside induced differentiation | MACROD3 | |
| GDEP | associated protein 2 | | |
| GDI1 | GDP dissociation inhibitor 1 | AA11W61057D9.1, IA, GDIL, MKX41, MKX40, | |
| GDPD1 | Glycerophosphodiester phosphodiesterase | ORIN2, BARCD1A, BARCD1A, YAB4 | |
| GDPD1 | domain containing 1 | GDE4 | |
| GEMIN6 | Gem (nuclear organelle) associated protein 6 | | |
| GEN1 | GEN1 Holliday junction 5' flap endonuclease | Gen | |
| GFM1 | G elongation factor, mitochondrial 1 | COXPD1, EFG, EFG1, EFGM, EGF1, GFM, hEFG1 | |
| GFOD1 | Glucose-fructose oxidoreductase domain | RP11-501I19.1, ADG-90, C6orf114 | |
| GFOD2 | Glucose-fructose oxidoreductase domain | UNQ9430/PRO34691 | |
| GFPT1 | Glutamine-fructose-6-phosphate | CM3TA1, GFA, GFAT, GFAT1, GFAT1, GFAT1M, | |
| GFPT1 | transaminase 1 | GFPTL, MSLG, GFPT1 | |
| GFRA1 | GDNF family receptor alpha 1 | GFRAK, MSNKA, GFR-ALPHA-1, KETTL, KETTL, | |
| GGA2 | Golgi-associated, gamma adaptin ear | TRND1 | |
| GGA2 | containing, gamma adaptin ear | VEAR | |
| GGA3 | Golgi-associated, gamma adaptin ear | | |
| GGA3 | containing, ADF-binding protein 2 | | |
| GGCT | Gamma-glutamylcyclotransferase | C7orf24, CRF21, GCTG, GGC | |
| GGNBP2 | Gametogenetin binding protein 2 | DIF-3, DIF3, LCRG1, LZK1, ZFP403, ZNF403 | |
| GGPS1 | Geranylgeranyl diphosphate synthase 1 | GGPPS, GGPPS1 | |
| GGT7 | Gamma-glutamyltransferase 7 | NP11-18C9.2, DZ05101, GGT4, GGT5, GGT5, | |
| GGT8P | Gamma-glutamyltransferase 8 pseudogene | HL8C0.2 | |
| GHITM | Growth hormone inducible transmembrane | My021, DERP2, HSPC282, MICS1, PTD010, TMBIM5 | |
| GHR | protein | GHPB | |
| GHRLOS | Ghrelin opposite strand/antisense RNA | GHRL-AS1, GHRLAS, NCRNA00068 | |
| GIGYF1 | GRB10 interacting GYF protein 1 | PP3360, GYF1, PERQ1 | |
| GIGYF2 | GRB10 interacting GYF protein 2 | GYF2, PARK11, PERQ2, PERQ3, TNRC15 | |
| GIMAP7 | GTPase, IMAP family member 7 | IAN7, hIAN7 | |
| GIN1 | Gypsy retrotransposon integrase 1 | GIN-1, TGIN1, ZH2C2 | |
| GIPC2 | GIPC1/2 domain containing family, | SEMCAP-2, SEMCAP2 | |
| GIT1 | G protein-coupled receptor kinase interacting | | |
| GIT1 | family class B | | |

| | | | |
|----------|---|--|--|
| GIT2 | G protein-coupled receptor kinase interacting protein 2 | CAT-2, CAT2 | |
| GJA3 | Gap junction protein, alpha 3, 46 kDa | CTRCT14, CX46, CZP3 | |
| GJA4 | Gap junction protein, alpha 4, 37 kDa | RP1-34M23.4, CX37 | |
| GJA5 | Gap junction protein, alpha 5, 40 kDa | ATFB11, CX40 | |
| GJA9 | Gap junction protein, alpha 9, 59 kDa | RP5-864K19.2, CX58, CX59, GJA10 | |
| GJB6 | Gap junction protein, beta 6, 30 kDa | CX30, DFNAS, DFNASB, DFNBD, ECTDZ, EDZ, EDL, HED, HED2 | |
| GJB7 | Gap junction protein, beta 7, 25 kDa | CX25, bA136M9.1, connexin25 | |
| GJC1 | Gap junction protein, gamma 1, 45 kDa | CX45, GJA7 | |
| GK | Glycerol kinase | GK1D, GK | |
| GK5 | Glycerol kinase 5 (putative) | RP11-485G4.2 | |
| GLB1 | Galactosidase, beta 1 | EBP, ELNR1, MPS4B | |
| GLB1L2 | Galactosidase, beta 1-like 2 | MSTP014, MST114, MSTP114 | |
| GLCCI1 | Glucocorticoid induced transcript 1 | FAM117C, GCTR, GIG18, TSSN1 | |
| GLDN | Gliomedin | UNQ9559/PRO3401, CLOM, COLM, CRG-LZ, CRGL2, LINC112 | |
| GLG1 | Golgi glycoprotein 1 | RP11-252A24.7, CFR-1, ESL-1, MG-160, MG160 | |
| GLI2 | GLI family zinc finger 2 | HPE9, PHS2, THP1, THP2 | |
| GLIPR1 | GLI pathogenesis-related 1 | CRISP7, GLIPR, RTVP1 | |
| GLIPR1L2 | GLI pathogenesis-related 1 like 2 | | |
| GLIPR2 | GLI pathogenesis-related 2 | RP11-421H8.5, C9orf19, GAPR-1, GAPR1 | |
| GLIS3 | GLIS family zinc finger 3 | ZNF515 | |
| GLP1R | Glucagon-like peptide 1 receptor | | |
| GLRA3 | Glycine receptor, alpha 3 | | |
| GLRX | Glutaredoxin (thioltransferase) | GRX, GRX1 | |
| GLS | Glutaminase | AAD20, GAC, GAM1, KGA, GLS | |
| GLT1D1 | Glycosyltransferase 1 domain containing 1 | | |
| GLT25D1 | | | |
| GLT8D2 | Glycosyltransferase 8 domain containing 2 | UNQ1901/PRO4347 | |
| GLYAT | Glycine-N-acyltransferase | ACGNAT, CAT, GAT | |
| GLYATL1 | Glycine-N-acyltransferase-like 1 | GATF-C, GNAT | |
| GLYATL3 | Glycine-N-acyltransferase-like 3 | RP11-28H17.5, C6orf140, bA28H17.2 | |
| GLYCTK | Glycerate kinase | LP5910, HBEBP2, HBEBP4, HBeAgBP4A | |
| GLYR1 | Glyoxylate reductase 1 homolog (Arabidopsis) | BM045, HIBDL, N-PAC, NP60 | |
| GMFB | Glia maturation factor, beta | GMF | |

| | | | |
|----------|--|--|---|
| GMPPA | GDP-mannose pyrophosphorylase A | AAMR | |
| GNA12 | Guanine nucleotide binding protein (G | NNX3, RMP, gep | |
| GNA13 | Guanine nucleotide binding protein (G | G13 | |
| GNA14 | Guanine nucleotide binding protein (G | | |
| GNAI1 | Guanine nucleotide binding protein (G | Gi | |
| GNAI3 | Guanine nucleotide binding protein (G | RP5-1160K1.2, 87U6, ARCND1 | |
| GNAO1 | Guanine nucleotide binding protein (G | EIEE17, G-ALPHA-o, GNAO | |
| GNAS | GNAS complex locus | RP4-545J17.4, AHO, C200H451, GISA, GSA, GST, NESP, DUB1A, DUB1B, DUB1C, DOLL, GNAS | v |
| GNAT1 | Guanine nucleotide binding protein (G | CSNBAD3, GBT1, GNATR | |
| GNAZ | Guanine nucleotide binding protein (G | | |
| GNB1 | Guanine nucleotide binding protein (G | RP1-283E3.7 | |
| GNB4 | Guanine nucleotide binding protein (G | RP11-145M9.4, CMTD1F | |
| GNB5 | Guanine nucleotide binding protein (G | GB5 | |
| GNG12 | Guanine nucleotide binding protein (G | RP5-975D15.2 | |
| GNG2 | Guanine nucleotide binding protein (G | | |
| GNG4 | Guanine nucleotide binding protein (G | | |
| GNL3L | Guanine nucleotide binding protein-like 3 (muscle-like) | RP11-353K22.1 | |
| GNPDA1 | Glucosamine-6-phosphate deaminase 1 | GNP1, GNPDA, GNPI, GPI, HLN | |
| GNPDA2 | Glucosamine-6-phosphate deaminase 2 | GNP2, SB52 | |
| GNPTAB | N-acetylglucosamine-1-phosphate transferase, alpha and beta subunits | GNPTA, ICD | |
| GNRHR | Gonadotropin-releasing hormone receptor | GNRHR1, GRHR, HH7, LHRHR, LRHR | |
| GNS | Glucosamine (N-acetyl)-6-sulfatase | G6S | |
| GOLGA1 | Golgin A1 | RP11-175D17.2, golgin-97 | |
| GOLGA3 | Golgin A3 | GCP170, MEA-2 | |
| GOLGA6D | Golgin A6 family, member D | | |
| GOLGA6L9 | Golgin A6 family-like 9 | GOLGA6L20 | |
| GOLGA7 | Golgin A7 | HDCKB05F, GCP10, GOLGA5A1TA, HSPC041, GOLGA7 | |
| GOLGA7B | Golgin A7 family, member B | C10orf132, C10orf133, bA451M19.3, bA459F3.4 | |
| GOLGA8A | Golgin A8 family, member A | GM88 | |
| GOLGA8B | Golgin A8 family, member B | GOLGA5 | |
| GOLGA8C | Golgi autoantigen, golgin subfamily a, 8C | | |
| GOLGA8DP | Golgin A8 family, member D, pseudogene | | |
| GOLGA8E | | | |

| | | | |
|---------|--|--|---|
| GOLGA8F | Golgin A8 family, member F | | |
| GOLGA8G | Golgin A8 family, member G | | |
| GOLGB1 | golgin B1 | GCP, GCP372, GOLIM1 | |
| GOLM1 | Golgi membrane protein 1 | RP11-579F1.3, C90H155, GOLM12, GP75, HELL40, PSEC0257, LA270D1.2 | |
| GOLPH3 | Golgi phosphoprotein 3 (coat-protein) | GOPP1, GPP34, MIDAS | |
| GOLPH3L | Golgi phosphoprotein 3-like | RP11-54A4.7, GPP34R | |
| GOLT1A | Golgi transport 1A | RP11-205F10.3, CGI-141, GOT1, HMFNT187, YMR292W | |
| GOLT1B | Golgi transport 1B | CGI-141, GCT2, GOT1, GOT1B, YMR292W | |
| GON4L | Gon-4-like (<i>C. elegans</i>) | RP11-101O6.1, GON-4, GON4, YARP | |
| GOPC | Golgi-associated PDZ and coiled-coil motif containing | CAL, FIG1, PIST, dJ94G16.2, GOPC | v |
| GORAB | Golgin, RAB6-interacting | GO, NTKLBP1, SCYL1BP1 | |
| GORASP1 | Golgi reassembly stacking protein 1, 65kDa | GOLPH5, GRASP65, P65 | |
| GORASP2 | Golgi reassembly stacking protein 2, 55kDa | GOLPH6, GRASP55, GRS2, p59 | |
| GOT1 | Glutamic-oxaloacetic transaminase 1, mitochondrial | ASTQTL1, GIG18, cAspAT, cCAT | |
| GOT2 | Glutamic-oxaloacetic transaminase 2, mitochondrial | KAT4, KATIV, mitAAT | |
| GP5 | Glycoprotein V (platelet) | CD42d, GPV | |
| GPAM | Glycerol-3-phosphate acyltransferase, mitochondrial | RP11-426E5.2, GPAT, GPAT1 | |
| GPATCH2 | G patch domain containing 2 | RP11-361K17.1, CT110, GPATC2, PPP1R30 | |
| GPBP1 | GC-rich promoter binding protein 1 | GPBP, SSH6, VASCULIN | |
| GPC2 | Glypican 2 | | |
| GPC4 | Glypican4 | RP6-198C21.1, K-glypican | |
| GPC5 | Glypican5 | | |
| GPCPD1 | Glycerophosphocholine phosphodiesterase | RP5-1022P6.2, GDE5, GDPD6, PREI4 | |
| GPD1 | Glycerol-3-phosphate dehydrogenase 1 (cytosolic) | AI747587, Gdc-1, Gdc1, mKIAA4010 | |
| GPD1L | Glycerol-3-phosphate dehydrogenase 1-like | GPD1-L | |
| GPD2 | Glycerol-3-phosphate dehydrogenase 2 (mitochondrial) | GDH2, GPDM, mGPDH | |
| GPLD1 | Glycosylphosphatidylinositol specific phospholipase D1 | GPIPLD, GPIPLDM, PIGPLD, PIGPLD1, PLD | |
| GPM6A | glycoprotein M6A | GPM6, M6A | |
| GPN2 | GPN-loop GTPase 2 | RP1-50O24.5, ATPBD1B | |
| GPN3 | GPN-loop GTPase 3 | AD-009, ATPBD1C | |
| GPR107 | G protein-coupled receptor 107 | GCDRP, LUSTR1, bA138E2.2 | |
| GPR110 | G protein-coupled receptor 110 | RP11-39C2.1, KPG_012, PGR19, hGPCR36 | |
| GPR113 | G protein-coupled receptor 113 | UNQ9196, PGR23, hGPCR37 | |

| | | | |
|---------|--|---|--|
| GPR116 | G protein-coupled receptor 116 | KPG_001 | |
| GPR12 | G protein-coupled receptor 12 | GPCR12, GPCR21, PPP1R84 | |
| GPR123 | G protein-coupled receptor 123 | RP13-439H18.10-002 | |
| GPR124 | G protein-coupled receptor 124 | TEM5 | |
| GPR125 | G protein-coupled receptor 125 | UNQ556/PRO1113, PGR21, TEM5L | |
| GPR126 | G protein-coupled receptor 126 | APG1, DREG, PS1TP2, VIGR | |
| GPR132 | G protein-coupled receptor 132 | G2A | |
| GPR135 | G protein-coupled receptor 135 | HUMNP11Y20 | |
| GPR137B | G protein-coupled receptor 137B | RP5-985L19.1, TM7SF1 | |
| GPR137C | G protein-coupled receptor 137C | TM7SF1L2 | |
| GPR155 | G protein-coupled receptor 155 | DEP.7, DEPDC3, PGR22 | |
| GPR157 | G protein-coupled receptor 157 | RP5-963K15.2 | |
| GPR160 | G protein-coupled receptor 160 | GPCR1, GPCR150 | |
| GPR171 | G protein-coupled receptor 171 | H963 | |
| GPR174 | G protein-coupled receptor 174 | FKSG79, GPCR17, LYPSR3 | |
| GPR180 | G protein-coupled receptor 180 | ITR | |
| GPR22 | G protein-coupled receptor 22 | tcag7.108 | |
| GPR26 | G protein-coupled receptor 26 | | |
| GPR3 | G protein-coupled receptor 3 | ACCA | |
| GPR37L1 | G protein-coupled receptor 37 like 1 | ET(B)R-LP-2, ETBR-LP-2 | |
| GPR4 | G protein-coupled receptor 4 | | |
| GPR52 | G protein-coupled receptor 52 | | |
| GPR6 | G protein-coupled receptor 6 | | |
| GPR64 | G protein-coupled receptor 64 | CTD-2245E12.1, EDDM6, HE6, TM7LN2 | |
| GPR81 | hydroxycarboxylic acid receptor 1 | FKSG80, GPR104, GPR61, HCAT, LACK1, TA-GPCR, TACPCR | |
| GPR83 | G protein-coupled receptor 83 | GIR, GPR72 | |
| GPR85 | G protein-coupled receptor 85 | SREB, SREB2 | |
| GPR88 | G protein-coupled receptor 88 | STRG | |
| GPR98 | G protein-coupled receptor 98 | FEB4, MASS1, USH2B, USH2C, VLGR1, VLGR1b | |
| GPRC5B | G protein-coupled receptor, class C, group 5, | RAIG-2, RAIG2 | |
| GPRIN1 | G protein-regulated inducer of neurite outgrowth 1 | GRIN1 | |
| GPRIN3 | GPRIN family member 3 | GRIN3 | |
| GPSM1 | G-protein signaling modulator 1 | RP13-270L15.1, AGS3 | |

| | | | |
|---------|---|--|--|
| GPT2 | Glutamic pyruvate transaminase (alanine aminotransferase) 2 | ALT2 | |
| GPX3 | Glutathione peroxidase 3 (plasma) | GPx-P, GSHPx-3, GSHPx-P | |
| GPX6 | Glutathione peroxidase 6 (olfactory) | GPX3p, GPX3, GPX-6, GSHPx-6, U1160LN24, U1186N74.1 | |
| GPX8 | Glutathione peroxidase 8 | UNQ26477/KO1783, EFLA847, GPX-8, GSHPx-8, UNQ847 | |
| GRAMD1C | GRAM domain containing 1C | UNQ2543/PRO6095 | |
| GRAMD2 | GRAM domain containing 2 | | |
| GRAMD3 | GRAM domain containing 3 | NS3TP2 | |
| GRAMD4 | GRAM domain containing 4 | RP6-59H18.4, DIP, dA59H18.1, dJ439F8.1 | |
| GRAP | GRB2-related adaptor protein | | |
| GRAP2 | GRB2-related adaptor protein 2 | KP3-570M22.1, GADS, GRAP-2, GRB2L, GRB2G, GRB, GRBL, G4X, G-640, Mags, P28 | |
| GRB10 | Growth factor receptor-bound protein 10 | GRB-IR, Grb-10, IRBP, MEG1, RSS | |
| GRB14 | Growth factor receptor-bound protein 14 | | |
| GREB1 | Growth regulation by estrogen in breast cancer 1 | | |
| GREM1 | Gremlin 1, DAN family BMP antagonist | FIG2, CKTSF1B1, CRAC1, DAND2, DNK1, GREMLIN, HMBS, HIC-2 | |
| GREM2 | Gremlin 2, DAN family BMP antagonist | CKTSF1B2, DAND3, PRDC | |
| GRHL1 | Grainyhead-like 1 | LBP32, MGR, NH32, TFPC2L2 | |
| GRHL2 | Grainyhead-like 2 | BOM, DFNA28, TFPC2L3 | |
| GRIA2 | Glutamate receptor, ionotropic, AMPA 2 | GLUR2, GLURB, GluA2, GluR-K2, HBGR2 | |
| GRIA3 | Glutamate receptor, ionotropic, AMPA 3 | KP11-549NT9.3, GLUR-C, GLUR-K3, GLUR3, GLURC, GluA3, MBX04 | |
| GRIA4 | Glutamate receptor, ionotropic, AMPA 4 | GLUR4, GLUR4C, GLURD, GluA4 | |
| GRID1 | Glutamate receptor, ionotropic, delta 1 | RP11-93H12.1, GluD1 | |
| GRID2 | Glutamate receptor, ionotropic, delta 2 | GluD2 | |
| GRIK2 | Glutamate receptor, ionotropic, kainate 2 | EAA4, GLR6, GLUK6, GLUR6, GluK2, MRT6 | |
| GRIK3 | Glutamate receptor, ionotropic, kainate 3 | EAA5, GLR7, GLUR7, GluK3, GluR7a | |
| GRIN1 | Glutamate receptor, ionotropic, N-methyl D-aspartate 1 | KP11-550GT4.1, GluN1, MKD6, NMDA1, NMDAR1, NP11-297M9.2, EFIN2, FESD, GluN2A, LKS, NMDAR2A, NR2A | |
| GRIN2A | Glutamate receptor, ionotropic, N-methyl D-aspartate 2A | | |
| GRIN2C | Glutamate receptor, ionotropic, N-methyl D-aspartate 2C | GluN2C, NMDAR2C, NR2C | |
| GRINL1A | | | |
| GRIP1 | Glutamate receptor interacting protein 1 | GRIP | |
| GRIP2 | Glutamate receptor interacting protein 2 | | |
| GRK6 | G protein-coupled receptor kinase 6 | GPRK6 | |
| GRLF1 | | | |
| GRM1 | Glutamate receptor, metabotropic 1 | GPRC1A, MGLU1, MGLUR1, PPP1R85, SCAR13 | |

| | | | |
|---------|--|--|--|
| GRM5 | Glutamate receptor, metabotropic 5 | GPRC1E, MGLUR5, PPP1R86, mGlu5 | |
| GRM6 | Glutamate receptor, metabotropic 6 | CSNB1B, GPRC1F, MGLUR6, mGlu6 | |
| GRM7 | Glutamate receptor, metabotropic 7 | GLUR7, GPRC1G, MGLU7, MGLUR7, PPP1R87 | |
| GRM8 | Glutamate receptor, metabotropic 8 | GLUR8, GPRC1H, MGLUR8, mGlu8 | |
| GRPEL1 | GrpE-like 1, mitochondrial | HMGE | |
| GRPEL2 | GrpE-like 2, mitochondrial | Mt-GrpE#2 | |
| GRRP1 | | | |
| GRSF1 | G-rich RNA sequence binding factor 1 | | |
| GSG1L | GSG1-like | UNQ5831, PRO19651 | |
| GSK3B | Glycogen synthase kinase 3 beta | | |
| GSPT1 | G1 to S phase transition 1 | 551G9.2, ETF3A, GST1, eRF3a | |
| GSR | Glutathione reductase | HEL-75 | |
| GSS | Glutathione synthetase | GSHS, HEL-S-64p, HEL-S-88n | |
| GSTA4 | Glutathione S-transferase alpha 4 | RP1-214M20.1-4, GTA4,GSTA4 | |
| GSTCD | Glutathione S-transferase, C-terminal domain containing | | |
| GSTM2 | Glutathione S-transferase mu 2 (muscle) | GST4, GSTM-2, GTHMUS,GSTM2 | |
| GSTM3 | Glutathione S-transferase mu 3 (brain) | RP4-735C1.2, GST5, GSTB-3, GTM3, GSTM3 | |
| GSTM5 | Glutathione S-transferase mu 5 | RP4-735C1.1-5, GTM5,GSTM5 | |
| GTDC1 | Glycosyltransferase-like domain containing | Hmat-Xa, mat-Xa | |
| GTF2E1 | General transcription factor IIc, polypeptide chain 56 kDa | FE, TF2E1, TFIIIE-A | |
| GTF2E2 | General transcription factor IIc, polypeptide chain 74 kDa | FE, TF2E2, TFIIIE-B | |
| GTF2F2 | General transcription factor III', polypeptide chain 20 kDa | BTF4, RAP30, TF2F2, TFIIF | |
| GTF2H1 | General transcription factor III', polypeptide chain 62 kDa | BTF2, P62, TFB1, TFIIH | |
| GTF2H2 | General transcription factor III', polypeptide chain 44 kDa | BTF2, BTF2P44, T-BTF2P44, TFIIH, p44 | |
| GTF2H2B | General transcription factor III', polypeptide chain 22 (pseudogene) | | |
| GTF2H2C | GTF2H2 family member C | | |
| GTF2H2D | GTF2H2 family member C, copy 2 | GTF2H2D | |
| GTF2H5 | General transcription factor III', polypeptide chain 5 kDa | COG175, TFB5, TFIIH, TGF2H5, TTD, TTD-A, TTD-B, TTD-C, TTD-D, TTD-E, TTD-F, TTD-G, TTD-H, TTD-I, TTD-J, TTD-K, TTD-L, TTD-M, TTD-N, TTD-O, TTD-P, TTD-Q, TTD-R, TTD-S, TTD-T, TTD-U, TTD-V, TTD-W, TTD-X, TTD-Y, TTD-Z | |
| GTF2I | General transcription factor Ii | BA170J5, BTKAF1, DIWS, GTFI-1, IBZ91, STFN, TTF-1, WBS, WBSCR6 | |
| GTF2IP1 | General transcription factor Ii, pseudogene 1 | WBSCR7 | |
| GTF3A | General transcription factor IIIA | RP11-125I23.2, AP2, TFIIIA | |
| GTF3C4 | General transcription factor IIIc, polypeptide chain 90 kDa | KAT12, TFIIIC90, TFIIIC290, TFIIIC90, TFIIICDELTA | |
| GTPBP1 | GTP binding protein 1 | RP3-508I15.1, GP-1, GP1, HSPC018 | |

| | | | |
|---------|--|---|---|
| GTPBP10 | GTP-binding protein 10 (putative) | UG0751c10, ObgH2 | |
| GTPBP3 | GTP binding protein 3 (mitochondrial) | GTPBG3, MSS1, MTGP1, THDF1 | |
| GTPBP6 | GTP binding protein 6 (putative) | LL0XNC01-136G2.2, PGPL | |
| GTSE1 | G-2 and S-phase expressed 1 | RP5-1163J1.2, B99 | |
| GUCA1B | Guanylate cyclase activator 1B (retina) | RP1-139D8.1, GCAP2, GUCA2, RP48 | |
| GUCY1A3 | Guanylate cyclase 1, soluble, alpha 3 | NP11-588K22.2, GC-SA3, GUC1A3, GUCAS, GUCSA3, GUCY1A1, MYMY6 | |
| GUCY1B2 | Guanylate cyclase 1, soluble, beta 2 | GC-SB2 | |
| GUCY1B3 | Guanylate cyclase 1, soluble, beta 3 | GC-S-beta-1, GC-SB3, GUC1B3, GUCB3, GUCSB3, GUCY1B1 | |
| GUF1 | GUF1 GTPase homolog | EF-4 | |
| GULP1 | GULF, engulfment adaptor FTD domain containing 1 | CED-6, CED6, GULP | |
| GUSBP1 | Glucuronidase, beta pseudogene 1 | | |
| GXYLT1 | Glucoside xylosyltransferase 1 | GLT8D3 | |
| GYG2 | Glycogenin 2 | GN-2, GN2 | |
| GYPA | Glycophorin A (MNS blood group) | CD235a, GFA, GPEAK, GPAT1, HGPMMV, HGPMMX1, UGzS6, CD230K, MNS, GPAS, G1D, G1TD, FAS-2, FAS-2 | |
| GYPC | Glycophorin C (Gerbich blood group) | | |
| GYS2 | Glycogen synthase 2 (liver) | | |
| H1F0 | H1 histone family, member 0 | H10, H1FV | |
| H2AFJ | H2A histone family, member J | H2AJ | |
| H2AFV | H2A histone family, member V | H2A.Z-2, H2AV | |
| H2AFZ | H2A histone family, member Z | H2A.Z-1, H2A.z, H2A/z, H2AZ | |
| H3F3B | H3 histone, family 3B (H3.3B) | H3.3B | v |
| H3F3C | H3 histone, family 3C | H3.5 | |
| H6PD | Hexose-6-phosphate dehydrogenase (glucose 6-phosphate dehydrogenase) | RP3-510D11.3, CORTRD1, G6PDH, GDH | |
| HABP2 | Hyaluronan binding protein 2 | FSAP, HABP, HGFAL, PHBP | |
| HADHA | Hydroxyacyl-CoA dehydrogenase/3-ketoacyl-CoA thiolase/3-methylcrotonyl-CoA carboxylase | ECHA, GDF, HADH, ECHH, ECHAD, MTPA, H-ALPHA | |
| HADHB | Hydroxyacyl-CoA dehydrogenase/3-ketoacyl-CoA thiolase/3-methylcrotonyl-CoA carboxylase | MSTP029, ECHB, MTPB, TP-BETA | |
| HAND2 | Hand and neural crest derivatives expressed 2 | DHAND2, Hed, Thing2, bHLHa26, dHand | |
| HAO1 | Hydroxyacid oxidase (glycolate oxidase) 1 | GOX, GOX1, HAOX1 | |
| HAPLN1 | Hyaluronan and proteoglycan link protein 1 | CRTL1 | |
| HAPLN4 | Hyaluronan and proteoglycan link protein 4 | BRAL2 | |
| HAR1A | Highly accelerated region 1A (non-protein coding) | HAR1F; LINC00064; NCRNA00064 | |
| HAUS2 | HAUS augmin-like complex, subunit 2 | C15orf25, CEP27, HsT17025 | |
| HAUS3 | HAUS augmin-like complex, subunit 3 | C4orf15, IT1, dgt3 | |

| | | | |
|---------|---|---|--|
| HAUS5 | HAUS augmin-like complex, subunit 5 | KIAA0841, dgt5 | |
| HAUS6 | HAUS augmin-like complex, subunit 6 | RP11-296P7.3, Dgt6, FAM29A | |
| HAVCR2 | Hepatitis A virus cellular receptor 2 | HAVcr-2, KIM-3, TIM3, TIMD-3, TIMD3, Tim-3 | |
| HBD | Hemoglobin, delta | | |
| HBP1 | HMG-box transcription factor 1 | | |
| HBS1L | HBS1-like translational GTPase | RP11-349J5.1, EF-1a, ERFS, HBS1, HSPC276, eRF3c | |
| HCFC1 | Host cell factor C1 | CFF, HCF-1, HCF1, HFC1, MRX3, PPP1R89, VCA | |
| HCFC2 | Host cell factor C2 | HCF-2, HCF2 | |
| HCG11 | HLA complex group 11 (non-protein coding) | bK14H9.3 | |
| HCLS1 | hematopoietic cell-specific Lyn substrate 1 | CTTNL, HS1, lckBP1, p75 | |
| HCN1 | hyperpolarization activated cyclic nucleotide-gated potassium channel 1 | BCNG-1, BCNG1, EIEE24, HAC-2 | |
| HCN2 | hyperpolarization activated cyclic nucleotide-gated potassium channel 2 | BCNG-2, BCNG2, HAC-1 | |
| HCN4 | hyperpolarization activated cyclic nucleotide-gated potassium channel 4 | SSS2 | |
| HCP5 | LA complex P5 (non-protein coding) | 6S2650E, D6S2650E, P5-1 | |
| HCRTR2 | Hypocretin (orexin) receptor 2 | OX2R | |
| HDAC4 | Histone deacetylase 4 | ATTO5, BDMK, HIA0110, HD4, HDAC-4, HDAC-A, HDAC4 | |
| HDAC6 | Histone deacetylase 6 | JM21, CPBHM, HD6, PPP1R90 | |
| HDAC8 | Histone deacetylase 8 | CDA07, CDLS5, HD8, HDACL1, MRXS6, RPD3, WTS | |
| HDAC9 | Histone deacetylase 9 | HD7, HD7B, HD9, HDAC, HDAC7, HDAC7BB, HDAC9EL, HD9B, MTR, HDAC9 | |
| HDGFRP3 | hepatoma-derived growth factor, related protein 3 | CGI-142HDGF-2, HDGF2, HRP-3 | |
| HDHD1A | hematopoietic deacetylase-like hydrolase domain containing 1 | DXF68S1E, FAM16AX, GS1A, HDHD1 | |
| HDX | Highly divergent homeobox | RP6-162O13.1, CXorf43, D030011N01Rik | |
| HEATR2 | HEAT repeat containing 2 | CILD18 | |
| HEATR3 | HEAT repeat containing 3 | SYO1 | |
| HEATR7A | | | |
| HEBP1 | Heme binding protein 1 | HBP, HEBP | |
| HECA | Headcase homolog | HDC, HDCL, HHDC, dJ225E12.1 | |
| HECTD2 | HECT domain containing E3 ubiquitin ligase 2 | RP11-108M11.2 | |
| HECW1 | HECT, C2 and WW domain containing E3 ubiquitin ligase 1 | NEDL1 | |
| HECW2 | HECT, C2 and WW domain containing E3 ubiquitin ligase 2 | NEDL2 | |
| HEG1 | heart development protein with EGF-like domains 1 | HEG, MST112, MSTP112 | |
| HELLS | Helicase, lymphoid-specific | Nbla10143, LSH, PASG, SMARCA6 | |
| HELZ | Helicase with zinc finger | DHRC, DRHC, HUMORF5 | |

| | | | |
|---------|--|--|---|
| HEMGN | Hemogen | PRO1037, CT155, EDAG, EDAG-1, NDR | |
| HEMK1 | HemK methyltransferase family member 1 | HEMK, MTQ1 | |
| HEPH | Hephaestin | RP13-238N7.1, CPL | |
| HEPHL1 | Hephaestin-like 1 | | |
| HEPN1 | Hepatocellular carcinoma, down-regulated 1 | | |
| HERC2P2 | Hect domain and RLD 2 pseudogene 2 | D15F37S3, MN7 | |
| HERC3 | HECT and RLD domain containing 3 | | |
| HERC4 | HECT and RLD domain containing 4 | RP11-57G10.4 | |
| HERC6 | HECT and RLD domain containing 6 | RP11-10L7.1 | |
| HERPUD1 | Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like | HERP, Mif1, SUP | √ |
| HES2 | Hes family bHLH transcription factor 2 | bHLHb40 | |
| HES5 | Hes family bHLH transcription factor 5 | RP3-395M20.5, bHLHb38 | |
| HEXIM1 | Hexamethylene bis-acetamide inducible 1 | CLP1, EDG1, HIS1, MAQ1 | |
| HEY1 | Hes-related family bHLH transcription factor with YDDW motif 1 | bHLHb51, CHP2, HERT2, HESK1, HKT-1, OAP1, | √ |
| HEY2 | Hes-related family bHLH transcription factor with YDDW motif 2 | KPT2, JEL3, CHP1, GRIDLOCK, ORL, HERT1, HESB2, HRT2, bHLHb22 | |
| HFE2 | Hemochromatosis type 2 (juvenile) | HFE2A, HJV, JH, RGMC | |
| HGC6.3 | Uncharacterized LOC100128124 | | |
| HGF | Hepatocyte growth factor (heparin-binding epidermal growth factor-like) | DFNB39, F-TCFB, HPTA, SF, HGF | |
| HGSNAT | Heparan-6-sulfate N-acetyltransferase | HGNAT, MPS3C, TMEM76 | |
| HHAT | Hedgehog acyltransferase | MART2, SKI1, Skn | |
| HHIP | Hedgehog interacting protein | UNQ5825/PRO19644, HIP | |
| HHIPL1 | HHIP-like 1 | UNQ9245/PRO34761, KIAA1822, UNQ9245 | |
| HHLA1 | HERV-H LTR-associating 1 | PLA2L | |
| HHLA2 | HERV-H LTR-associating 2 | B7H7 | |
| HIC2 | Hypermethylated in cancer 2 | HRG22, ZBTB30, ZNF907 | |
| HIF1AN | Hypoxia inducible factor 1, alpha subunit inhibitor | FIH1 | |
| HIF3A | Hypoxia inducible factor 3, alpha subunit | HIF-3A, IPAS, MOP7, PASD7, bHLHe17 | |
| HIGD1A | HIF1 hypoxia inducible domain family, member 1A | HSPC010, HIG1, RCF1a | |
| HIGD2A | HIF1 hypoxia inducible domain family, member 2A | RCF1b | |
| HINT3 | Histidine triad nucleotide binding protein 3 | HINT4 | |
| HIP1R | Huntingtin interacting protein 1 related | HIP12, HIP3, ILWEQ | |
| HIPK1 | Homeodomain interacting protein kinase 1 | RP4-786G8.2, Myak, Nbak2 | |
| HIPK2 | Homeodomain interacting protein kinase 2 | PRO0593 | |

| | | | |
|-----------|--|---|---|
| HIST1H2BC | Histone cluster 1, H2bc | H2B.1, H2B/l, H2BFL, dJ221C16.3 | |
| HIST1H2BD | Histone cluster 1, H2bd | H2B.1B, H2B/b, H2BFB, HIRIP2, dJ221C16.6 | |
| HIST1H2BN | Histone cluster 1, H2bn | RP1-193B12.10-001, H2B/d, H2BFD | |
| HIST1H3D | Histone cluster 1, H3d | H3/b, H3FB | |
| HIST2H4A | Histone cluster 2, H4a | FO108, H4, H4/n, H4F2, H4FN, HIST2H4 | |
| HIVEP1 | Human immunodeficiency virus type 1 enhancer-binding protein 1 | KF5-451B15.2, CIRM, CRTBP1, GAA1, MDP-1, FRDIP-DE1, Schmitt-1, ZAS1, ZNF40, ZNF40A | |
| HK1 | Hexokinase 1 | HK1-ta-tb, HK1-tc, HKD, HKI, HMSNR, HXK1, HK1 | |
| HK2 | Hexokinase 2 | HKII, HXK2 | |
| HKR1 | HKR1, GLI-Krüppel zinc finger family member | ZNF875 | |
| HLA-A | Major histocompatibility complex, class I, A | DAQB-90C11.16-002, HLAA | |
| HLA-B | Major histocompatibility complex, class I, B | CDABP0067, AS, HLAB, SPDA1 | |
| HLA-C | Major histocompatibility complex, class I, C | AA04c-DCX10110.2, D6S204, HLA-F15, HLC-C, PSORS1 | |
| HLA-DMB | Major histocompatibility complex, class II, DMB | DAAP-27A1.4, D6S221E, RING7 | |
| HLA-DPA1 | Major histocompatibility complex, class II, DPA1 | DAAP-277G16.1, DP(W3), DP(W4), HLA-DP1A, | |
| HLA-DQA1 | Major histocompatibility complex, class II, DQA1 | DAQP-109D16.7, DL1, UELIAC1, DQ-A1, GSE, HLA-DQA | |
| HLA-DQB2 | Major histocompatibility complex, class II, DQB2 | DAMA-367I24.2, HLA-DQB1, HLA-DXB | |
| HLA-F | Major histocompatibility complex, class I, F | DADB-68M4.2, CDA12, HLA-5.4, HLA-CDA12, HLA-F | |
| HLA-G | Major histocompatibility complex, class I, G | DADB-15K14.8, MHC-G | |
| HLA-J | Major histocompatibility complex, class I, J | CDA12, D6S203, HLA-59, HLA-CDA12 | |
| HLA-L | Major histocompatibility complex, class I, L (sequence) | hCG_23770, HLA-92, HLA92, HLAL | |
| HLF | Hepatic leukemia factor | | v |
| HLTF | Helicase-like transcription factor | HIT110, HIT110A1, KMT60, SMARCA5, SMT2L3, ZP13-24UT7.0, H13, HM11, HM1A5, HM1A5-1, MSTR086, PSEN1, DSL2, SDB, SDBL1, dJ224C17.1 | |
| HM13 | Histocompatibility (minor) 13 | | |
| HMBOX1 | Homeobox containing 1 | HNF1LA, HOT1, PBHNF | |
| HMBS | Hydroxymethylbilane synthase | PBG-D, PBGD, PORC, UPS | |
| HMGA2 | High mobility group AT-hook 2 | BABL, HMGI-C, HMGIC, LIPO, STQTL9 | v |
| HMGB1 | High mobility group box 1 | RP11-550P23.1, HMG1, HMG3, SBP-1 | |
| HMGB2 | High mobility group box 2 | HMGB2 | |
| HMGB3 | High mobility group box 3 | HMG-2a, HMG-4, HMG2A, HMG4 | |
| HMGCL | 5-hydroxymethyl-5-methylglutaryl-CoA | HL | |
| HMGCLL1 | 5-hydroxymethyl-5-methylglutaryl-CoA | RP11-418P12.1, bA418P12.1, er-cHL | |
| HMGCS1 | 5-hydroxy-5-methylglutaryl-CoA synthase 1 (high mobility group nucleosomal binding domain 2) | HMGCS | |
| HMGN2 | | HMG17 | |

| | | | |
|-----------|--|---|---|
| HMGXB4 | HMG box domain containing 4 | RP3-510H16.1, HMG2L1, HMGBCG, THC211630 | |
| HMX1 | H6 family homeobox 1 | H6, NKX5-3 | |
| HNF1B | HNF1 homeobox B | HNF1B, HNF1B-1B, HNF1Bbeta, HNF1Z, HNF1T, LF-B3, LEP2, MODY5, TCF2, TCF2, VUNF1 | |
| HNF4G | Hepatocyte nuclear factor 4, gamma | NR2A2, NR2A3 | |
| HNMT | Histamine N-methyltransferase | HMT-S1, HNMT-S2, HNMT | |
| HNRNPA0 | Heterogeneous nuclear ribonucleoprotein A0 | HNRPA0 | |
| HNRNPA1 | Heterogeneous nuclear ribonucleoprotein A1 | AL519, AL520, HNRK1A1, HNRK1A1L3, HNRK1A1L5, HNRK1A1L7, HNRK1A2, HNRK1A1, HNRK1A2, HNRK1A2D1, HNRK1A2D2, HNRK1A2D3, HNRK1A2D4, HNRK1A2D5, HNRK1A2D6, HNRK1A2D7, HNRK1A2D8, HNRK1A2D9, HNRK1A2D10, HNRK1A2D11, HNRK1A2D12, HNRK1A2D13, HNRK1A2D14, HNRK1A2D15, HNRK1A2D16, HNRK1A2D17, HNRK1A2D18, HNRK1A2D19, HNRK1A2D20, HNRK1A2D21, HNRK1A2D22, HNRK1A2D23, HNRK1A2D24, HNRK1A2D25, HNRK1A2D26, HNRK1A2D27, HNRK1A2D28, HNRK1A2D29, HNRK1A2D30, HNRK1A2D31, HNRK1A2D32, HNRK1A2D33, HNRK1A2D34, HNRK1A2D35, HNRK1A2D36, HNRK1A2D37, HNRK1A2D38, HNRK1A2D39, HNRK1A2D40, HNRK1A2D41, HNRK1A2D42, HNRK1A2D43, HNRK1A2D44, HNRK1A2D45, HNRK1A2D46, HNRK1A2D47, HNRK1A2D48, HNRK1A2D49, HNRK1A2D50, HNRK1A2D51, HNRK1A2D52, HNRK1A2D53, HNRK1A2D54, HNRK1A2D55, HNRK1A2D56, HNRK1A2D57, HNRK1A2D58, HNRK1A2D59, HNRK1A2D60, HNRK1A2D61, HNRK1A2D62, HNRK1A2D63, HNRK1A2D64, HNRK1A2D65, HNRK1A2D66, HNRK1A2D67, HNRK1A2D68, HNRK1A2D69, HNRK1A2D70, HNRK1A2D71, HNRK1A2D72, HNRK1A2D73, HNRK1A2D74, HNRK1A2D75, HNRK1A2D76, HNRK1A2D77, HNRK1A2D78, HNRK1A2D79, HNRK1A2D80, HNRK1A2D81, HNRK1A2D82, HNRK1A2D83, HNRK1A2D84, HNRK1A2D85, HNRK1A2D86, HNRK1A2D87, HNRK1A2D88, HNRK1A2D89, HNRK1A2D90, HNRK1A2D91, HNRK1A2D92, HNRK1A2D93, HNRK1A2D94, HNRK1A2D95, HNRK1A2D96, HNRK1A2D97, HNRK1A2D98, HNRK1A2D99, HNRK1A2D100 | |
| HNRNPA2B1 | Heterogeneous nuclear ribonucleoprotein A2/B1 | HNRNPA2, HNRNPA1, HNRNPA2, HNRNPA2D1, HNRNPA2D2, HNRNPA2D3, HNRNPA2D4, HNRNPA2D5, HNRNPA2D6, HNRNPA2D7, HNRNPA2D8, HNRNPA2D9, HNRNPA2D10, HNRNPA2D11, HNRNPA2D12, HNRNPA2D13, HNRNPA2D14, HNRNPA2D15, HNRNPA2D16, HNRNPA2D17, HNRNPA2D18, HNRNPA2D19, HNRNPA2D20, HNRNPA2D21, HNRNPA2D22, HNRNPA2D23, HNRNPA2D24, HNRNPA2D25, HNRNPA2D26, HNRNPA2D27, HNRNPA2D28, HNRNPA2D29, HNRNPA2D30, HNRNPA2D31, HNRNPA2D32, HNRNPA2D33, HNRNPA2D34, HNRNPA2D35, HNRNPA2D36, HNRNPA2D37, HNRNPA2D38, HNRNPA2D39, HNRNPA2D40, HNRNPA2D41, HNRNPA2D42, HNRNPA2D43, HNRNPA2D44, HNRNPA2D45, HNRNPA2D46, HNRNPA2D47, HNRNPA2D48, HNRNPA2D49, HNRNPA2D50, HNRNPA2D51, HNRNPA2D52, HNRNPA2D53, HNRNPA2D54, HNRNPA2D55, HNRNPA2D56, HNRNPA2D57, HNRNPA2D58, HNRNPA2D59, HNRNPA2D60, HNRNPA2D61, HNRNPA2D62, HNRNPA2D63, HNRNPA2D64, HNRNPA2D65, HNRNPA2D66, HNRNPA2D67, HNRNPA2D68, HNRNPA2D69, HNRNPA2D70, HNRNPA2D71, HNRNPA2D72, HNRNPA2D73, HNRNPA2D74, HNRNPA2D75, HNRNPA2D76, HNRNPA2D77, HNRNPA2D78, HNRNPA2D79, HNRNPA2D80, HNRNPA2D81, HNRNPA2D82, HNRNPA2D83, HNRNPA2D84, HNRNPA2D85, HNRNPA2D86, HNRNPA2D87, HNRNPA2D88, HNRNPA2D89, HNRNPA2D90, HNRNPA2D91, HNRNPA2D92, HNRNPA2D93, HNRNPA2D94, HNRNPA2D95, HNRNPA2D96, HNRNPA2D97, HNRNPA2D98, HNRNPA2D99, HNRNPA2D100 | √ |
| HNRNPA3 | Heterogeneous nuclear ribonucleoprotein A3 | 2610510D13Rik, D10S102, FBRNP, HNRPA3 | |
| HNRNPA3P1 | Heterogeneous nuclear ribonucleoprotein A3P1 | D10S102, FBRNP, HNRPA3, HNRPA3P1 | |
| HNRNPC | Heterogeneous nuclear ribonucleoprotein C (C1/C2) | C1, C2, HNRNP, HNRPC, SNRPC | |
| HNRNPD | Heterogeneous nuclear ribonucleoprotein D (AUF1) | AUF1, AUF1A, HNRPD, P37, hnRNPD0 | |
| HNRNPH1 | Heterogeneous nuclear ribonucleoprotein H1 | HNRPH, HNRPH1, hnRNPH | |
| HNRNPH3 | Heterogeneous nuclear ribonucleoprotein H3 | 2H9, HNRPH3 | |
| HNRNPK | Heterogeneous nuclear ribonucleoprotein K | RP11-575L7.1, CSBP, HNRPK, TUNP | |
| HNRNPU | Heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A) | RP11-11N7.3, HNRPU, SAF-A, U21.1, hnRNP U | |
| HOMER2 | Homer homolog 2 (Drosophila) | ACPD, CPD, HOMER-2, VESL- | |
| HOOK1 | Hook microtubule-tethering protein 1 | HK1 | |
| HOOK3 | Hook microtubule-tethering protein 3 | HK3 | √ |
| HOXA1 | Homeobox A1 | BSAS, HOX1, HOX1F | |
| HOXA11 | Homeobox A11 | HOX1, HOX1I | √ |
| HOXA3 | Homeobox A3 | HOX1, HOX1E | |
| HOXA7 | Homeobox A7 | ANTP, HOX1, HOX1.1, HOX1A | |
| HOXB4 | Homeobox B4 | HOX-2.6, HOX2, HOX2F | |
| HOXB5 | Homeobox B5 | HHO.C10, HOX2, HOX2A, HU-1, Hox2.1 | |
| HOXB8 | Homeobox B8 | HOX2, HOX2D, Hox-2.4 | |
| HOXB9 | Homeobox B9 | HOX-2.5, HOX2, HOX2E | |
| HOXC11 | Homeobox C11 | HOX3H | √ |
| HOXC13 | Homeobox C13 | ECTD9, HOX3, HOX3G | √ |
| HOXC5 | Homeobox C5 | CP11, HOX3, HOX3D | |
| HOXC8 | Homeobox C8 | HOX4, HOX4E, HOX5.4 | |
| HOXD1 | Homeobox D1 | HOX4, HOX4G, Hox-4.7 | |
| HOXD10 | Homeobox D10 | HOX4, HOX4D, HOX4E, Hox-4.4 | |

| | | | |
|----------|---|---|--|
| HOXD3 | Homeobox D3 | HOX1D, HOX4, HOX4A, Hox-4.1 | |
| HOXD8 | Homeobox D8 | HOX4, HOX4E, HOX5.4 | |
| HP1BP3 | Heterochromatin protein 1, binding protein 3 | RP5-930J4.3, HP1-BP74 | |
| HPCAL4 | Hippocalcin like 4 | HLP4 | |
| HPGD | Hydroxyprostaglandin dehydrogenase 15-(NADP) | 15-PGDH, PGDH, PGDH1, PHOAR1, SDR36C1 | |
| HPRT1 | Hypoxanthine phosphoribosyltransferase 1 | HGPRT, HPRT | |
| HPS3 | Hermansky-Pudlak syndrome 3 | SUTAL | |
| HPS4 | Hermansky-Pudlak syndrome 4 | CTB-1048E9.4, LE | |
| HPS5 | Hermansky-Pudlak syndrome 5 | AIBP63 | |
| HPSE2 | Heparanase 2 (inactive) | HPA2, HPR2, UFS, UFS1 | |
| HR | Hair growth associated | ALUNC, AU, HSA277165, HYPT4, MUHH, MUHH1 | |
| HRASLS5 | HRAS-like suppressor family, member 5 | HRLP5, HRSL5, RLP1, iNAT | |
| HRCT1 | Histidine rich carboxyl terminus 1 | RP11-327L3.6, LGLL338, PRO537, UNQ338 | |
| HRH1 | Histamine receptor H1 | H1-R, hisH1 | |
| HRH4 | Histamine receptor H4 | AXOR35, BG26, GPCR105, GPRv53, H4, H4R, HH4R | |
| HS2ST1 | Heparan sulfate 2-O-sulfotransferase 1 | dJ604K5.2 | |
| HS3ST2 | Heparan sulfate 2-O-sulfotransferase | | |
| HS3ST3A1 | Heparan sulfate (glucosamine) 3-O-sulfotransferase 3A1 | UNQ2551/PRO6180, 30ST3A1, 3OST3A1 | |
| HS6ST1 | Heparan sulfate 6-O-sulfotransferase 1 | HH15, HS6ST | |
| HS6ST3 | heparan sulfate 6-O-sulfotransferase 3 | RP11-235O20.1, HS6ST-3 | |
| HSBP1L1 | Heat shock factor binding protein 1-like 1 | | |
| HSD11B1 | Hydroxysteroid (11-beta) dehydrogenase 1 | 11-BD1, 11-beta-HSD1, CORTKD2, HDL, HSD11, HSD11B, HSD11L, SDR36C1 | |
| HSD17B1 | Hydroxysteroid (17-beta) dehydrogenase 1 | EDH17B2, EDHB17, HSD17, SDR28C1 | |
| HSD17B11 | Hydroxysteroid (17-beta) dehydrogenase 11 | 17B-HSD11, HSD17B11, HSD17B11.1, HSD17B11.2, HSD17B11.3, HSD17B11.4, HSD17B11.5, HSD17B11.6, HSD17B11.7, HSD17B11.8, HSD17B11.9, HSD17B11.10, HSD17B11.11, HSD17B11.12, HSD17B11.13, HSD17B11.14, HSD17B11.15, HSD17B11.16, HSD17B11.17, HSD17B11.18, HSD17B11.19, HSD17B11.20, HSD17B11.21, HSD17B11.22, HSD17B11.23, HSD17B11.24, HSD17B11.25, HSD17B11.26, HSD17B11.27, HSD17B11.28, HSD17B11.29, HSD17B11.30, HSD17B11.31, HSD17B11.32, HSD17B11.33, HSD17B11.34, HSD17B11.35, HSD17B11.36, HSD17B11.37, HSD17B11.38, HSD17B11.39, HSD17B11.40, HSD17B11.41, HSD17B11.42, HSD17B11.43, HSD17B11.44, HSD17B11.45, HSD17B11.46, HSD17B11.47, HSD17B11.48, HSD17B11.49, HSD17B11.50, HSD17B11.51, HSD17B11.52, HSD17B11.53, HSD17B11.54, HSD17B11.55, HSD17B11.56, HSD17B11.57, HSD17B11.58, HSD17B11.59, HSD17B11.60, HSD17B11.61, HSD17B11.62, HSD17B11.63, HSD17B11.64, HSD17B11.65, HSD17B11.66, HSD17B11.67, HSD17B11.68, HSD17B11.69, HSD17B11.70, HSD17B11.71, HSD17B11.72, HSD17B11.73, HSD17B11.74, HSD17B11.75, HSD17B11.76, HSD17B11.77, HSD17B11.78, HSD17B11.79, HSD17B11.80, HSD17B11.81, HSD17B11.82, HSD17B11.83, HSD17B11.84, HSD17B11.85, HSD17B11.86, HSD17B11.87, HSD17B11.88, HSD17B11.89, HSD17B11.90, HSD17B11.91, HSD17B11.92, HSD17B11.93, HSD17B11.94, HSD17B11.95, HSD17B11.96, HSD17B11.97, HSD17B11.98, HSD17B11.99, HSD17B11.100 | |
| HSD17B12 | Hydroxysteroid (17-beta) dehydrogenase 12 | KAR, SDR12C1 | |
| HSD17B2 | Hydroxysteroid (17-beta) dehydrogenase 2 | EDH17B2, HSD17, SDR9C2 | |
| HSD17B7 | Hydroxysteroid (17-beta) dehydrogenase 7 | RP11-331H2.1, PRAP, SDR37C1 | |
| HSD3B1 | Hydroxy-delta-3-steroid dehydrogenase, 3-beta-oxo-delta-3-steroid isomerase 1 | RP5-920G3.4, 3BETAHSD, HSD3B, HSD3B1, HSD3B2, HSD3B3, HSD3B4, HSD3B5, HSD3B6, HSD3B7, HSD3B8, HSD3B9, HSD3B10, HSD3B11, HSD3B12, HSD3B13, HSD3B14, HSD3B15, HSD3B16, HSD3B17, HSD3B18, HSD3B19, HSD3B20, HSD3B21, HSD3B22, HSD3B23, HSD3B24, HSD3B25, HSD3B26, HSD3B27, HSD3B28, HSD3B29, HSD3B30, HSD3B31, HSD3B32, HSD3B33, HSD3B34, HSD3B35, HSD3B36, HSD3B37, HSD3B38, HSD3B39, HSD3B40, HSD3B41, HSD3B42, HSD3B43, HSD3B44, HSD3B45, HSD3B46, HSD3B47, HSD3B48, HSD3B49, HSD3B50, HSD3B51, HSD3B52, HSD3B53, HSD3B54, HSD3B55, HSD3B56, HSD3B57, HSD3B58, HSD3B59, HSD3B60, HSD3B61, HSD3B62, HSD3B63, HSD3B64, HSD3B65, HSD3B66, HSD3B67, HSD3B68, HSD3B69, HSD3B70, HSD3B71, HSD3B72, HSD3B73, HSD3B74, HSD3B75, HSD3B76, HSD3B77, HSD3B78, HSD3B79, HSD3B80, HSD3B81, HSD3B82, HSD3B83, HSD3B84, HSD3B85, HSD3B86, HSD3B87, HSD3B88, HSD3B89, HSD3B90, HSD3B91, HSD3B92, HSD3B93, HSD3B94, HSD3B95, HSD3B96, HSD3B97, HSD3B98, HSD3B99, HSD3B100 | |
| HSDL1 | Hydroxysteroid dehydrogenase like 1 | SDR12C3 | |
| HSDL2 | Hydroxysteroid dehydrogenase like 2 | RP11-32M23.1, C9orf99, SDR13C1 | |
| HSF2 | Heat shock transcription factor 2 | HSF 2, HSTF 2 | |
| HSF2BP | Heat shock transcription factor 2 binding protein | | |
| HSFX1 | Heat shock transcription factor family, X-linked 1 | hCG_27154, LW-1 | |

| | | | |
|-----------|--|--|--|
| HSFY1 | Heat shock transcription factor, Y-linked 1 | HSF2L, HSFY | |
| HSFY2 | Heat shock transcription factor, Y-linked 2 | HSF2L, HSFY | |
| HSP90AB2P | Heat shock protein 90 kDa alpha (cytosolic), member 2 | HSP90BB | |
| HSP90B1 | Heat shock protein 90 kDa beta (Grp94), member 1 | ECGP, GP96, GRP94, HEL-S-125m, HEL35, TRA1 | |
| HSPA12A | Heat shock 70 kDa protein 12A | RP11-539I5.1 | |
| HSPA12B | Heat shock 70kD protein 12B | RP5-1009E24.4, C20orf60, dJ1009E24.2 | |
| HSPA13 | Heat shock protein 70 kDa family, member 13 | STCH | |
| HSPA1B | Heat shock 70 kDa protein 1B | DAAP-21F2.7, HSP70-1B, HSP70-2 | |
| HSPA1L | Heat shock 70 kDa protein 1-like | DADB-555F21.3, HSF70-1L, HSF70-100M, HSF70L, hsm70L | |
| HSPA5 | Heat shock 70 kDa protein 5 (glucose-corticoid-inducible) | BIP, GRP78, HEL-S-89n, MIF2 | |
| HSPB11 | Heat shock protein family B (small), member 11 | HSPC034, C1orf41, HSPC034, IFT25, PP25 | |
| HSPB3 | Heat shock 27 kDa protein 3 | DHMN2C, HMN2C, HSPL27 | |
| HSPC157 | | | |
| HSPC159 | | | |
| HSPH1 | Heat shock 105 kDa/110kDa protein 1 | RP11-173F10.1, HSF105, HSF105A, HSF105B, HT-CO-25 | |
| HTATSF1 | HIV-1 Tat specific factor 1 | RP1-196E23.2, TAT-SF1, TATSF1, dJ196E23.2 | |
| HTR1F | 5-Hydroxytryptamine (serotonin) receptor 1F | 5-HT-1F, 5-HT1F, 5HT6, HTR1EL, MR77 | |
| HTR2C | 5-Hydroxytryptamine (serotonin) receptor 2C | RP11-810O3.1, 5-HT2C, 5-HTR2C, 5HTR2C, HTR1C | |
| HTR4 | 5-Hydroxytryptamine (serotonin) receptor 4 | 5-HT4, 5-HT4R | |
| HTR7 | 5-Hydroxytryptamine (serotonin) receptor 7 | RP11-103A2.1, 5-HT7 | |
| HTR7P1 | 5-Hydroxytryptamine (serotonin) receptor 7 pseudogene 1 | | |
| HTT | Huntingtin | HD, IT15 | |
| HUS1 | HUS1 checkpoint homolog (S. pombe) | tcag7.704, hHUS1 | |
| HUWE1 | HECT, UBA and WW domain containing E3 ubiquitin-protein ligase | RP5-559A16.4, ANF-DT1, HECT119, HSPC272, I0772, LASH1, MULE, UBE-D1, UBER1 | |
| HVCN1 | Hydrogen voltage-gated channel 1 | UNQ578/PRO1140, HV1, VSOP | |
| HYAL2 | Hyaluronoglucosaminidase 2 | LUCA2 | |
| HYAL4 | Hyaluronoglucosaminidase 4 | CSHY | |
| HYALP1 | Hyaluronoglucosaminidase pseudogene 1 | tcag7.1303, HYAL6 | |
| HYOU1 | Hypoxia up-regulated 1 | GRP-170, Grp170, HSP12A, ORP-150, ORP150 | |
| IAPP | Islet amyloid polypeptide | DAP, IAP | |
| ICA1L | Islet cell autoantigen 1,69 kDa-like | ALS2CR14, ALS2CR15 | |
| ICK | Intestinal cell (MAK-like) kinase | ECO, LCK2, MRK | |
| ICMT | Isoprenylcysteine carboxyl methyltransferase | RP1-120G22.4, HST1E14, MST1096, MST1096, FCCMT, ICMT, DBMT | |

| | | | |
|--------|--|---|---|
| ICOSLG | Inducible T-cell co-stimulator ligand | B7-H2, B7-H2, B7-1, B7-1, CD275, UL30, ICOS-L, ICOSL, ICOS | |
| ICT1 | Immature colon carcinoma transcript 1 | DS-1, DS1, MRP-L58 | |
| ID4 | Inhibitor of DNA binding 4, dominant negative helix-loop-helix protein | IDB4, bHLHb27 | |
| IDE | Insulin-degrading enzyme | RP11-366I13.1, INSULYSIN | |
| IDH1 | Isocitrate dehydrogenase 1 (NADP+), soluble | HEL-216, HEL-S-26, IDCD, IDH, IDP, IDPC, PICD | v |
| IDH3A | Isocitrate dehydrogenase 3 (NAD+) alpha | | |
| IDI1 | Isopentenyl-diphosphate delta isomerase 1 | IPP1, IPPI1 | |
| IDO2 | Indoleamine 2,3-dioxygenase 2 | INDOL1 | |
| IDS | Iduronate 2-sulfatase | MPS2, SIDS | |
| IER2 | Immediate early response 2 | ETR101 | |
| IFFO1 | Intermediate filament family orphan 1 | HOM-TES-103, IFFO | |
| IFFO2 | Intermediate filament family orphan 2 | RP1-93P18.1 | |
| IFI44L | Interferon-induced protein 44-like | GS3686, C1orf29 | |
| IFIT1 | Interferon-induced protein with tetratricopeptide repeats 1 | RP11-168G10.1, C50, G10F1, IFI50, IFI50K, IFI50, IFIT1, IFNA1, ISC56, P56, PNM561 | |
| IFIT1B | Interferon-induced protein with tetratricopeptide repeats 1B | Chromosome 10, NC_000010.11 (89378056..89385205) | |
| IFIT5 | Interferon-induced protein with tetratricopeptide repeats 5 | P58, RI58 | |
| IFNA17 | Interferon, alpha 17 | RP11-380P16.10-001, IFN-alphaI, IFNA, INFA, LEIF2C1 | |
| IFNA4 | Interferon, alpha 4 | IFN-alpha4a, INFA4 | |
| IFNAR1 | Interferon (alpha, beta and omega) receptor 1 | AVP, IFN-alpha-REC, IFNAR, IFNBR, IFRC | |
| IFNG | Interferon gamma | IFG, IFI | |
| IFRD1 | Interferon-related developmental regulator 1 | PC4, TIS7 | |
| IFT172 | Intraflagellar transport 172 | NPHP17, SLB, SRTD10, osm-1, wim | |
| IFT27 | Intraflagellar transport 27 | LL22NC01-132D12.2, BBS19, RABL4, RAYL | |
| IFT57 | Intraflagellar transport 57 | ESRRBL1, HIPPI, MHS4R2 | |
| IFT74 | Intraflagellar transport 74 | CCDC2, CMG-1, CMG1 | |
| IFT80 | Intraflagellar transport 80 | ATD2, SRTD2, WDR56 | |
| IFT81 | Intraflagellar transport 81 | CDV-1, CDV-1R, CDV1, CDV1R, DV1 | |
| IFT88 | Intraflagellar transport 88 | RP11-172H24.2, D15S1050E, DAF19, IG757, TTC10, IFT88 | |
| IGDCC3 | immunoglobulin superfamily, DCC subclass, member 3 | HsT18880, PUNC | |
| IGDCC4 | immunoglobulin superfamily, DCC subclass, member 4 | DDM36, NOPE | |
| IGF1 | insulin-like growth factor 1 (somatomedin C) | IGF-IA, IGFI, IGF1 | |
| IGF1R | Insulin-like growth factor 1 receptor | CD221, IGFIR, IGFR, JTK13 | |
| IGF2 | Insulin-like growth factor 2 | PP1446, C11orf43, IGF-II, PP9974 | |

| | | | |
|---------|---|---|---|
| IGF2BP2 | Insulin-like growth factor 2 mRNA binding protein 2 | IMP-2, IMP2, VICKZ2 | |
| IGF2BP3 | Insulin-like growth factor 2 mRNA binding protein 3 | CT98, IMP-3, IMP3, KOC, KOC1, VICKZ3 | |
| IGFBP3 | Insulin-like growth factor binding protein 3 | tcag7.703, BP-53, IBP3 | |
| IGFBP4 | Insulin-like growth factor binding protein 4 | BP-4, HT29-IGFBP, IBP4, IGFBP-4 | |
| IGFBP5 | Insulin-like growth factor binding protein 5 | IBP5 | |
| IGFN1 | immunoglobulin-like and fibronectin type III domain-containing 1 | EEF1A2BP1 | |
| IGHD | Immunoglobulin heavy constant delta | | |
| IGHG1 | immunoglobulin heavy constant gamma 1 (C1q marker) | | |
| IGL@ | | | v |
| IGLL1 | Immunoglobulin lambda-like polypeptide 1 | I4.1, AGM2, CD179, IGL1, IGL2, IGLT4.1, IGLL, IGT1-IGYD9.1, VDPF2 | |
| IGSF1 | Immunoglobulin superfamily, member 1 | IGSF1, IGYP2, VDPF2, IGCD1, IGDC1, INIB1, IGSP2, IGSP3 | |
| IGSF11 | Immunoglobulin superfamily, member 11 | BT-IgSF, CT119, CXADRL1, Igsf13, VSIG3 | |
| IGSF5 | Immunoglobulin superfamily, member 5 | GSF5, JAM4 | |
| IGSF6 | Immunoglobulin superfamily, member 6 | DORA | |
| IGSF9 | Immunoglobulin superfamily, member 9 | RP11-48O20.2, FP18798A, Nrt1, IGSF9 | |
| IKBIP | IKKB interacting protein | IKIP | |
| IKKB | inhibitor of kappa light polypeptide gene enhancer in B-cells kinase beta | IKK-beta, IKK2, IKKB, IMD15, NFKBIKB | |
| IKZF2 | IKAROS family zinc finger 2 (Helios) | ANF1A2, HELIOS, ZNF1A2, ZNFN1A2 | |
| IKZF4 | IKAROS family zinc finger 4 (Eos) | EOS, ZNFN1A4 | |
| IKZF5 | IKAROS family zinc finger 5 (Pegasus) | PEGASUS, ZNFN1A5 | |
| IL10 | Interleukin 10 | RP11-262N9.1, CSIF, GVHDS, IL-10A, TGIF, IL10 | |
| IL10RA | Interleukin 10 receptor, alpha | CD210, CD210a, CDW210A, HIL-10R, IL-10R1, IL10R | |
| IL12A | Interleukin 12A | CLMF, IL-12A, NFSK, NKSF1, P35 | |
| IL12B | Interleukin 12b | CLMF, CLMF2, IL-12B, IMD28, IMD29, NKSF, NKSF2 | |
| IL12RB2 | Interleukin 12 receptor, beta 2 | RP11-102M16.1 | |
| IL13RA2 | Interleukin 13 receptor, alpha 2 | CD213A2, CT19, IL-13R, IL13BP | |
| IL15 | Interleukin 15 | IL-15 | |
| IL16 | Interleukin 16 | LCF, NIL16, PRIL16, prIL-16 | |
| IL17RC | Interleukin 17 receptor C | UNQ6118/PRO20040/PRO38901, IL17-RL, IL17RL | |
| IL17RD | Interleukin 17 receptor D | UNQ6115/PRO20026, HH18, IL-17RD, IL17RLM, SEF | |
| IL17RE | Interleukin 17 receptor E | UNQ3056/PRO9877 | |
| IL17REL | Interleukin 17 receptor E-like | RP3-355C18.6 | |
| IL18R1 | Interleukin 18 receptor 1 | CD218a, CDw218a, IL-1Rrp, IL18RA, IL1RRP | |

| | | | |
|---------|---|--|---|
| IL1A | Interleukin 1, alpha | IL-1A, IL1, IL1-ALPHA, IL1F1 | |
| IL1B | Interleukin 1, beta | IL-1, IL1-BETA, IL1F2 | |
| IL1F5 | | | |
| IL1F8 | | | |
| IL1R1 | Interleukin 1 receptor, type I | CD121A, D2S1473, IL-1R-alpha, IL1R, IL1RA, P80 | |
| IL1RAP | Interleukin 1 receptor accessory protein | C3orf13, IL-1RAcP, IL1R3 | |
| IL2 | Interleukin 2 | IL-2, TCGF, lymphokine | √ |
| IL20RB | Interleukin 20 receptor beta | hCG_2022374, DIRS1, FNDC6, IL-20R2 | |
| IL21R | Interleukin 21 receptor | UNQ3121/PRO10273, CD360, NILR | √ |
| IL22RA2 | Interleukin 22 receptor, alpha 2 | UNQ3195/PRO19598/PRO19822, CNF2-10, CNF2-31, CPE2X, IL-22RB, IL-22R-alpha-2, IL-22RA2 | |
| IL23A | Interleukin 23, alpha subunit p19 | UNQ2498/PRO5798, IL-23, IL-23A, IL23P19, P19, SGRF | |
| IL23R | Interleukin 23 receptor | | |
| IL24 | Interleukin 24 | C49A, FISP, IL10B, MDA7, MOB5, ST16 | |
| IL25 | Interleukin 25 | UNQ3120/PRO10272, IL17E | |
| IL27RA | Interleukin 27 receptor, alpha | UNQ296/PRO336, CRL1, IL-27RA, IL27R, TCCR, WSX1, zcytor1 | |
| IL2RB | Interleukin 2 receptor, beta | RP5-1170K4.6, CD122, IL15RB, P70-75 | |
| IL3 | Interleukin 3 | IL-3, MCGF, MULTI-CSF | |
| IL31 | Interleukin 31 | IL-31 | |
| IL33 | Interleukin 33 | KPT1-575C20.2, C90H20, DVS27, ILIT11, NF-HEV, NFEHEV | |
| IL6R | Interleukin 6 receptor | CD126, IL-6R-1, IL-6RA, IL6QA, IL6RQ, gp80, IL6R | |
| IL6ST | Interleukin 6 signal transducer | CD130, CDW130, GP130, IL-6RB | |
| IL7 | Interleukin 7 | IL-7 | |
| IL7R | Interleukin 7 receptor | CD127, CDW127, IL-7R-alphaA, ILRA, IL7R | |
| IL8 | | | |
| ILDR1 | immunoglobulin-like domain containing | DFNB42alpha, ILDR1alpha', ILDR1beta, ILDR1 | |
| ILDR2 | immunoglobulin-like domain containing | RP4-782G3.2, C1orf32, dJ782G3.1 | |
| ILF3 | Interleukin enhancer binding factor 3, 90 kDa | CD11, DNBP, DNBP70, MIMF4, MHCOS114, MIF4, NE-AT-00, NE110, NE110L, NE90, NE90L, NE90L | |
| IMMP1L | inner mitochondrial membrane | IMP1, IMP1-LIKE | |
| IMP3 | IMP3, U3 small nucleolar ribonucleoprotein | BRMS2, C15orf12, MRPS4 | |
| IMPA1 | Inositol(myo)-1(or 4)-monophosphatase 1 | IMP, IMPA | |
| IMPAD1 | Inositol monophosphatase domain containing | GPAPP, IMP 3, IMP-3, IMPA3 | |
| IMPG1 | Interphotoreceptor matrix proteoglycan 1 | RP11-758J17.1, GP147, IPM150, SPACR | |
| IMPG2 | Interphotoreceptor matrix proteoglycan 2 | IPM200, RP56, SPACRCAN | |

| | | | |
|---------|--|---|--|
| INADL | InaD-like (Drosophila) | RP4-537K17.1, Cipp, InaD-like, PATJ, hINADL | |
| INCENP | Inner centromere protein antigens 135/155 kDa | | |
| ING1 | Inhibitor of growth family, member 1 | RP11-8D7.1, p24ING1C, p55, p55ING1, p55ING1B, p47, p47ING1A | |
| ING3 | Inhibitor of growth family, member 3 | HSPC301, Eaf4, ING2, MEAF4, p47ING3 | |
| ING5 | Inhibitor of growth family, member 5 | p28ING5 | |
| INHBC | Inhibin, beta C | IHBC | |
| INHBE | Inhibin, beta E | | |
| INMT | Indolethylamine N-methyltransferase | TEMT | |
| INO80 | INO80 complex subunit | INO80A, INOC1, hINO80 | |
| INO80C | INO80 complex subunit C | C18orf37, IES6, hIes6 | |
| INO80D | INO80 complex subunit D | | |
| INPP4A | Inositol polyphosphate-4-phosphatase, type I, | INPP4, TVAS1 | |
| INPP4B | Inositol polyphosphate-4-phosphatase, type II, 105 kDa | | |
| INPP5A | Inositol polyphosphate-5-phosphatase, 40 kDa | RP11-288G11.1, 5PTASE | |
| INPP5E | Inositol polyphosphate-5-phosphatase, 72 kDa | CORS1, CPD4, JBTS1, MORMS, PPI5PIV | |
| INPP5F | Inositol polyphosphate-5-phosphatase F | MSTP007, MSTPO47, SAC2, hSAC2 | |
| INSIG1 | Insulin induced gene 1 | CL-6, CL6 | |
| INSIG2 | Insulin induced gene 2 | | |
| INSM1 | Insulinoma-associated 1 | IA-1, IA1 | |
| INSR | Insulin receptor | CD220, HHF5 | |
| INTS2 | Integrator complex subunit 2 | INT2, KIAA1287 | |
| INTS3 | Integrator complex subunit 3 | RP11-216N14.2, C1orf193, C1orf60, INT3, SOSS-A, SOSSA | |
| INTS4L1 | Integrator complex subunit 4-like 1 | | |
| INTS4L2 | Integrator complex subunit 4-like 2 | | |
| INTS6 | Integrator complex subunit 6 | RP11-24B19.2, DBI-1, DDX26, DDX26A, DICE1, HDB, INT6, Notch12 | |
| INTS7 | Integrator complex subunit 7 | C1orf73, INT7 | |
| INTS8 | Integrator complex subunit 8 | C8orf52, INT8 | |
| INTU | Inturned planar cell polarity protein | INT, PDZD6, PDZK6 | |
| INVS | Inversin | RP11-208F1.1, INV, NPH2, NPHP2 | |
| IP6K2 | Inositol hexakisphosphate kinase 2 | TCCCIA00113, IHPK2, PIUS | |
| IPCEF1 | interaction protein for cytoskeleton exchange factor 1 | RP3-402L9.2, PIP3-E | |
| IPO5 | Importin 5 | RP11-72J7.1, IMB3, KPNB3, Pse1, RANBP5, imp5 | |
| IPO7 | Importin 7 | Imp7, RANBP7 | |

| | | | |
|----------|--|---|---|
| IPO8 | Importin 8 | RANBP8 | |
| IPPK | Inositol 1,3,4,5,6-pentakisphosphate 2-kinase | C9orf12, INSP5K2, IP5K, IPK1, bA476B13.1 | |
| IPW | imprinted in Prader-Willi syndrome (non-protein coding) | NCRNA00002 | |
| IQCE | IQ motif containing E | 1700028P05Rik | |
| IQCH | IQ motif containing H | NYDSP5 | |
| IQCK | IQ motif containing K | | |
| IQGAP1 | IQ motif containing GTPase activating protein 1 | HUMORFA01, SAR1, p195 | |
| IQGAP2 | IQ motif containing GTPase activating protein 2 | | |
| IQSEC2 | IQ motif and Sec7 domain 2 | RP11-258C19.1, BRAG1, MRX1 | |
| IQSEC3 | IQ motif and Sec7 domain 3 | | |
| IQUB | IQ motif and ubiquitin domain containing | | |
| IRAK1BP1 | interleukin-1 receptor-associated kinase 1 binding protein 1 | AIP70, SIMPL | |
| IRAK3 | Interleukin-1 receptor-associated kinase 3 | ASRT5, IRAKM | |
| IRAK4 | Interleukin-1 receptor-associated kinase 4 | RP11-210N13.4, IPD1, IRAK-4, NY-REN-64, REN64 | |
| IREB2 | Iron-responsive element binding protein 2 | ACO3, IRP2, IRP2AD | |
| IRF4 | Interferon regulatory factor 4 | LSIRF, MUM1, NF-EM5 | √ |
| IRF5 | Interferon regulatory factor 5 | | |
| IRF8 | Interferon regulatory factor 8 | H-ICSBP, ICSBP, ICSBP1, IMD32A, IMD32B, IRF-8 | |
| IRGQ | Immunity-related GTPase family, Q | FKSG271, IRGQ | |
| IRS1 | Insulin receptor substrate 1 | HIRS-1 | |
| IRS2 | Insulin receptor substrate 2 | Irs-2 | |
| IRX1 | Iroquois homeobox 1 | IRX-5, IRXA1 | |
| ISCA1 | Iron-sulfur cluster assembly 1 | GK004, HBLD2, ISA1, hIscA | |
| ISCA1P1 | Iron-sulfur cluster assembly 1 pseudogene 1 | | |
| ISCA2 | Iron-sulfur cluster assembly 2 | HBLD1, ISA2, c14_5557 | |
| ISOC1 | Isochorismatase domain containing 1 | CGI-111 | |
| ISPD | Isoprenoid synthase domain containing | RP11-196O16.1, MDDGA7, Nip, hCG_1745121 | |
| ISX | Intestine-specific homeobox | Pix-1, RAXLX | |
| ITCH | Itchy E3 ubiquitin protein ligase | AIF4, AIP4, NAPP1, dJ468O1.1 | |
| ITFG2 | Integrin alpha FG-GAP repeat containing 2 | MDS028 | |
| ITFG3 | Integrin alpha FG-GAP repeat containing 3 | C16orf9, gs19 | |
| ITGA2 | integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor) | BR, CD49B, GPIa, HPA-5, VLA-2, VLAA2 | |
| ITGA2B | Integrin, alpha 2b (platelet glycoprotein IIb of | BDT1T10, BDT1T12, CD41, CD41B, G12B, G110, G1, CTA, HPA2, PPP1D02 | |

| | | | |
|----------|--|--|---|
| ITGA3 | Integrin, alpha 3 (antigen CD49C, alpha 3) | CD49C, GAI-B3, GAI-B3, ILNEB, MSK16, VCA-2, VLA-2A, VLA-2B | |
| ITGA4 | Integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 complex) | CD49D, IA4 | |
| ITGA6 | Integrin, alpha 6 | CD49fB, VLA-6, ITGA6 | |
| ITGAD | Integrin, alpha D | ADB2, CD11D | |
| ITGAL | Integrin, alpha L (antigen CD11A (p180)) | CD11A, LFA-1, LFA1A | |
| ITGAX | Integrin, alpha X (component component 3) | CD11C, SLEB6 | |
| ITGB1 | Integrin, beta 1 (fibronectin receptor, beta subunit of integrin CD29; includes MDEF2) | IT11-479GZ2.2, CD29, FNKB, GIIA, MDT2, MSK12, ICA1-BETA, ICA1-1B, ICA1-Talpha, ICA1-T, ICA1-TA, ICA1-B | |
| ITGB1BP1 | Integrin beta 1 binding protein 1 | | |
| ITGB3 | Integrin, beta 3 (platelet glycoprotein IIIa, antigen CD61) | BDPLT16, BDPLT2, CD61, GP3A, GPIIIa, GT | |
| ITGB8 | Integrin, beta 8 | | |
| ITIH1 | Inter-alpha-trypsin inhibitor heavy chain 1 | H1P, IATIH, IGHEP1, ITI-HC1, ITIH, SHAP | |
| ITIH5 | Inter-alpha-trypsin inhibitor heavy chain family member 5 | PP14776, ITI-HC5 | |
| ITLN1 | Intelectin 1 (galactofuranose binding) | UNQ040/PRO1270, ILE-1, ILE1, INTL, ILEN, LFK, ILEL, ILENT | |
| ITM2C | Integral membrane protein 2C | hucep-14, BRI3, BRICD2C, E25, E25C, ITM3 | |
| ITPKB | Inositol-trisphosphate 3-kinase B | IP3-3KB, IP3K, IP3K-B, IP3KB, PIG37 | |
| ITPR2 | Inositol 1,4,5-trisphosphate receptor, type 2 | CFAP48, IP3R2 | |
| ITPRIP | Inositol 1,4,5-trisphosphate receptor | IT11-127L20.4, DANGLK, KIAA1734, UAT27L20, LA127L20.2 | |
| ITPRIPL2 | Inositol 1,4,5-trisphosphate receptor interacting protein like 2 | C130081G24, E030018N11Rik | |
| ITSN1 | Intersectin 1 (SH3 domain protein) | ITSN, SH3D1A, SH3P17 | |
| ITSN2 | Intersectin 2 | PRO2015, SH3D1B, SH3P18, SWA, SWAP | |
| IVD | Isovaleryl-CoA dehydrogenase | ACAD2 | |
| IWS1 | IWS1 homolog (S. cerevisiae) | | |
| IYD | Iodotyrosine deiodinase | C6orf71, DEHAL1, TDH4, dJ422F24.1 | |
| JAK2 | Janus kinase 2 | JTK10, THCYT3 | v |
| JAKMIP3 | Janus kinase and microtubule interacting protein 3 | IT11-140A10.0, C100H14, C100H39, Jamp3, NECC2, LA140A10.5 | |
| JAM3 | Junctional adhesion molecule 3 | UNQ859/PRO1868, JAM-2, JAM-3, JAM-C, JAMC | |
| JARID2 | Jumonji, AT rich interactive domain 2 | JMJ | |
| JAZF1 | JAZF zinc finger 1 | tcag7.981, TIP27, ZNF802 | v |
| JDP2 | Jun dimerization protein 2 | JUNDM2 | |
| JHDM1D | | | |
| JKAMP | JNK1/MAPK8-associated membrane protein | CDA06, C14orf100, HSPC213, HSPC327, JAMP | |
| JMJD1C | Jumonji domain containing 1C | RP11-10C13.2, TRIP8 | |
| JMJD5 | | | |

| | | | |
|---------|--|---|---|
| JMJD6 | Jumonji domain containing 6 | PSR, PTDSR, PTDSR1 | |
| JMJD7 | Jumonji domain containing 7 | hCG_37726 | |
| JMY | Junction mediating and regulatory protein, p53 cofactor | WHDC1L3 | |
| JPH1 | Junctophilin 1 | JP-1, JP1 | |
| JPH2 | Junctophilin 2 | CMH17, JP-2, JP2 | |
| JPH4 | Junctophilin 4 | JP4, JPHL1 | |
| JRK | Jrk homolog (mouse) | JH8, jerky | |
| JRKL | JRK-like | HHMJG | |
| JUN | Jun proto-oncogene | AP-1, AP1, c-Jun | v |
| KAL1 | Kallmann syndrome 1 sequence | ADMLX, HH1, HHA, KAL, KALIG-1, KMS, WFDC19 | |
| KALRN | kalirin, RhoGEF kinase | KRT11-7/1117.7, ANKRD24, CHD3, CHD33, DCL1, DLG, HARP, TRAP | |
| KANK1 | KN motif and ankyrin repeat domains 1 | RP11-130C19.4, ANKRD15, CPSQ2, KANK | |
| KANK2 | KN motif and ankyrin repeat domains 2 | ANKRD25, MXRA3, SIP | |
| KAT2A | K(lysine) acetyltransferase 2A | GCN5, GCN5L2, PCAF-b, hGCN5 | |
| KAT2B | K(lysine) acetyltransferase 2B | CAF, P/CAF, PCAF | |
| KATNAL1 | Katanin p60 subunit A-like 1 | RP11-374F3.1 | |
| KAZ | Kazrin, periplakin interacting protein | RP1-21O18.1, KAZ | |
| KAZALD1 | Kazal-type serine peptidase inhibitor domain | KRT11-108L7.10-001, DONO1, FKSO28, FKSO40, IOTD1, D10 | |
| KBTBD11 | Kctd repeat and BTB (POZ) domain | KLHDC7C | |
| KBTBD12 | Kctd repeat and BTB (POZ) domain | 4833415F11Rik, 4933428M03Rik, Klhdc6 | |
| KBTBD2 | Kctd repeat and BTB (POZ) domain | CGI-73, BKLHD1 | |
| KBTBD6 | Kctd repeat and BTB (POZ) domain | | |
| KBTBD7 | Kctd repeat and BTB (POZ) domain | | |
| KBTBD8 | Kctd repeat and BTB (POZ) domain containing 8 | AU040152, SSEC-51, SSEC51, Takrp, mKIAA1842 | |
| KCMF1 | Potassium channel modulatory factor 1 | DEBT91, FIGC, PCMF, ZZZ1 | |
| KCNA1 | Potassium voltage-gated channel, shaker-related subfamily member 1 | ALMIX, EAT, HBN1, HUK1, KV1.1, MDK1, MK1, RPF1 | |
| KCNA3 | Potassium voltage-gated channel, shaker-related subfamily member 3 | RP11-284N6.3, HOK3, HUK3, HUCNS, HUKM, KV1.3, MK2, PCN2 | |
| KCNA6 | Potassium voltage-gated channel, shaker-related subfamily member 6 | HBK2, KV1.6, PPP1R96 | |
| KCNA7 | Potassium voltage-gated channel, shaker-related subfamily member 7 | HAK6, KV1.7 | |
| KCNAB1 | Potassium voltage-gated channel, shaker-related subfamily member 1 | AKK0A3, KCNAB7, KV-BETA-1, KV01.3, HKVbeta3, KV-beta2 | |
| KCNAB2 | Potassium voltage-gated channel, shaker-related subfamily member 2 | RP23-421E12.12-005, F5, I2rf5, Kcnb3, kv-beta-2 | |
| KCNB1 | Potassium voltage-gated channel, Shaw-related subfamily member 1 | DRK1, KV2.1, h-DRK1 | |
| KCNC2 | Potassium voltage-gated channel, Shaw-related subfamily member 2 | KV3.2 | |

| | | | |
|--------|--|--|---|
| KCNC4 | Potassium voltage-gated channel, Shaw-related family, member 4 | C1orf30, HKSHIIC, KSHIIC, KV3.4 | |
| KCND2 | Potassium voltage-gated channel, Shaw-related family, member 2 | KV4.2, RK5 | |
| KCNE1L | KCNE1-like | RP1-136J15.2, KCNE5 | |
| KCNE2 | Potassium voltage-gated channel, Isk-related family, member 2 | ATFB4, LQT5, LQT6, MIRP1 | |
| KCNE3 | Potassium voltage-gated channel, Isk-related family, member 3 | HOKPP, HYPP, MiRP2 | |
| KCNE4 | Potassium voltage-gated channel, Isk-related family, member 4 | MIRP3 | |
| KCNG1 | Potassium voltage-gated channel, subfamily G | RP5-955M13.1, K13, KCNG, Kv6.1, kH2 | |
| KCNG3 | Potassium voltage-gated channel, subfamily G | KV10.1, KV6.3 | |
| KCNH1 | Potassium voltage-gated channel, subfamily H | EAG, EAG1, Kv10.1, h-eag | |
| KCNH8 | Potassium voltage-gated channel, subfamily H (ass-related), member 8 | ELK, ELK1, Kv12.1, elk3 | |
| KCNIP2 | Kv channel interacting protein 2 | KCHIP2 | |
| KCNIP3 | Kv channel interacting protein 3, calsenilin | CSEN, DREAM, KCHIP3 | |
| KCNJ1 | Potassium inwardly-rectifying channel, subfamily J, member 1 | KIR1.1, ROMK, ROMK1 | |
| KCNJ10 | Potassium inwardly-rectifying channel, subfamily J, member 10 | BIRK-10, KCNJ13-PEN, KIR1.2, KIR4.1, SESAME | |
| KCNJ12 | Potassium inwardly-rectifying channel, subfamily J, member 12 | IRK-2, IRK2, KCNJ11, Kir2.2, Kir2.2v, hIRK, hIRK1, Kir2.2, Kir2.2v | |
| KCNJ13 | Potassium inwardly-rectifying channel, subfamily J, member 13 | KIR1.4, KIR7.1, LCA16, SVD | |
| KCNJ14 | Potassium inwardly-rectifying channel, subfamily J, member 14 | IRK4, KIR2.4 | |
| KCNJ15 | Potassium inwardly-rectifying channel, subfamily J, member 15 | IRKK, KIR1.3, KIR4.2 | |
| KCNJ2 | Potassium inwardly-rectifying channel, subfamily J, member 2 | ATPB9, HIRK1, HIRK1, IRK1, Kir2.1, LQT7, SQT2 | |
| KCNJ3 | Potassium inwardly-rectifying channel, subfamily J, member 3 | GIRK1, KGA, KIR3.1 | |
| KCNJ5 | Potassium inwardly-rectifying channel, subfamily J, member 5 | CIR, GIRK4, KATP1, KIR3.4, LQT13 | v |
| KCNJ8 | Potassium inwardly-rectifying channel, subfamily J, member 8 | KIR6.1, uKATP-1 | |
| KCNK1 | Potassium channel, subfamily K, member 1 | K2p5.0/15.1, DFK, HCN0, K2P1, K2p1.1, KCNK1, TWIK-1, TWIK1 | |
| KCNK10 | Potassium channel, subfamily K, member 10 | K2p10.1, PPP1R97, TREK-2, TREK2 | |
| KCNK13 | Potassium channel, subfamily K, member 13 | K2p13.1, THIK-1, THIK1 | |
| KCNK2 | Potassium channel, subfamily K, member 2 | K2p2.1, HIRK1, TREK, TREK-1, TREK1, HIRK-1c, hTREK-1c | |
| KCNK5 | Potassium channel, subfamily K, member 5 | K2p5.1, TASK-2, TASK2 | |
| KCNK6 | Potassium channel, subfamily K, member 6 | K2p6.1, KCNK8, TOSS, TWIK-2, TWIK2 | |
| KCNK9 | Potassium channel, subfamily K, member 9 | K2p9.1, KT3.2, TASK-3, TASK3 | |
| KCNMA1 | Potassium large conductance calcium-activated channel, subfamily M, member 1 | K11-445A15.1, BKTM, KCa1.1, MaxIK, SARCA, SLO, | |
| KCNMB1 | Potassium large conductance calcium-activated channel, subfamily M, member 1 | BKdelta1, K(vCA)delta, SLO-Delta, hdelta1, hSLO-beta, h(VCA)delta, hdelta1 | |
| KCNMB2 | Potassium large conductance calcium-activated channel, subfamily M, member 2 | hCG_1646471 | |
| KCNMB3 | Potassium large conductance calcium-activated channel, subfamily M, member 3 | BKdelta3, hdelta3, K(vCA)delta-3, KCNMB2, KCNMB1, SLO-BETA-2, SLO-BETA-2 | |

| | | | |
|---------|--|---|---|
| KCNN1 | Potassium intermediate/small conductance | KCa2.1, SK1, SKCA1, hSK1 | |
| KCNQ5 | Potassium voltage-gated channel, KQT-like | RP11-257K9.5, Kv7.5 | |
| KCNS2 | Potassium voltage-gated channel, delayed-rectifier | KV9.2 | |
| KCTD1 | Potassium channel tetramerization domain | hCG_38480, C18orf5, SENS | |
| KCTD10 | Potassium channel tetramerization domain | MSTP028, BTBD28, ULRO61, hBACURD3 | |
| KCTD12 | Potassium channel tetramerization domain | C13orf2, PFET1, PFETIN | |
| KCTD14 | Potassium channel tetramerization domain | | |
| KCTD16 | Potassium channel tetramerization domain | | |
| KCTD2 | Potassium channel tetramerization domain | | |
| KCTD20 | Potassium channel tetramerization domain | RP1-108K11.2, C6orf69, dJ108K11.3 | |
| KCTD21 | Potassium channel tetramerization domain | KCASH2 | |
| KCTD3 | Potassium channel tetramerization domain | RP11-5F19.1, NY-REN-45 | |
| KCTD7 | Potassium channel tetramerization domain | CLN14, EPM3 | |
| KCTD9 | Potassium channel tetramerization domain | BTBD27 | |
| KDELC2 | KDEL (Lys-Asp-Glu-Leu) containing 2 | UNQ1904/PRO4350 | |
| KDELR2 | KDEL (Lys-Asp-Glu-Leu) endoplasmic | tcag7.840, ELP-1, ERD2.2 | |
| KDELR3 | KDEL (Lys-Asp-Glu-Leu) endoplasmic | RP3-434P1.3, ERD2L3 | |
| KDM1B | Lysine (K)-specific demethylase 1B | RP1-298J13.1, AOT1, COO1193, LSD2, UA204B7.3, H309115.2 | |
| KDM2A | Lysine (K)-specific demethylase 2A | CXXC8, FBL11, FBL7, FBXL11, JHDM1A, LILINA | |
| KDM2B | Lysine (K)-specific demethylase 2B | CXXC2, FBXL10, Fbl10, JHDM1B, PCCX2 | |
| KDM4B | Lysine (K)-specific demethylase 4B | JMJD2B, TDRD14B | |
| KDM4C | Lysine (K)-specific demethylase 4C | RP11-109L18.1, GAS1, JHDM3C, JMJD2C, TDRD14C, LA146B14.1 | |
| KDM4D | Lysine (K)-specific demethylase 4D | JMJD2D | |
| KDM5A | Lysine (K)-specific demethylase 5A | RBBP-2, RBBP2, RBP2 | √ |
| KDM5B | Lysine (K)-specific demethylase 5B | UT51, JARID1B, FEO-1, FEO1, TTF1R98, TOTT, RPPP238A | |
| KDM5C | Lysine (K)-specific demethylase 5C | DAST2/ZE, JARID1C, MIKAT3, MIKAT3, MBX6CL, MBX6L, SMCX, VE160 | √ |
| KDM6A | Lysine (K)-specific demethylase 6A | RP13-886N14.3, KABUK2, UTX, bA386N14.2 | √ |
| KDR | Kinase insert domain receptor (a type III | CD309, FLK1, VEGFR, VEGFR2 | √ |
| KDSR | 3-ketodihydrosphingosine reductase | DHSR, FVT1, SDR35C1 | |
| KERA | Keratocan | CNA2, KTN, SLRR2B | |
| KGFLP1 | Fibroblast growth factor 7 pseudogene | | |
| KHDC1 | KH homology domain containing 1 | RP11-257K9.4, C6orf148, NDG1, bA257K9.4 | |
| KHDRBS1 | KH domain containing, RNA binding, signal | Sam68, p62, p68 | |

| | | | |
|-----------|---|--|--|
| KHDRBS3 | KH domain containing, KNA binding, signal transduction associated 2 | Etle, SALP, SLM-2, SLM2, T-STAR, TSTAR, etoile | |
| KHSRP | KH-type splicing regulatory protein | FBP2, FUBP2, KSRP | |
| KIAA0040 | KIAA0040 | | |
| KIAA0090 | | | |
| KIAA0101 | KIAA0101 | L5, NS5ATP9, OEATC, OEATC-1, OEATC1, PAF, PAF15, p15(PAF), p | |
| KIAA0114 | | | |
| KIAA0125 | KIAA0125 | HSPC053, C14orf110, FAM30A | |
| KIAA0141 | KIAA0141 | DELE | |
| KIAA0146 | | | |
| KIAA0182 | | | |
| KIAA0195 | KIAA0195 | TMEM94 | |
| KIAA0196 | KIAA0196 | RTSC, SPG8 | |
| KIAA0226 | KIAA0226 | hCG_22771, RUBICON, SCAR15 | |
| KIAA0232 | KIAA0232 | | |
| KIAA0240 | | | |
| KIAA0247 | KIAA0247 | | |
| KIAA0284 | KIAA0284 protein | | |
| KIAA0319L | KIAA0319-like | PP791 | |
| KIAA0408 | KIAA0408 | RP3-403A15.2 | |
| KIAA0427 | | | |
| KIAA0430 | KIAA0430 | LKAP, MARF1, PPP1R34 | |
| KIAA0467 | | | |
| KIAA0494 | | | |
| KIAA0513 | KIAA0513 | | |
| KIAA0528 | | | |
| KIAA0556 | KIAA0556 | | |
| KIAA0664 | | | |
| KIAA0753 | KIAA0753 | | |
| KIAA0754 | KIAA0754 | | |
| KIAA0802 | | | |
| KIAA0892 | | | |
| KIAA0895 | KIAA0895 | | |
| KIAA0907 | KIAA0907 | RP11-336K24.1, BLOM7 | |

| | | | |
|----------|-----------------|--|---|
| KIAA0913 | | | |
| KIAA0922 | KIAA0922 | TMEM131L | |
| KIAA1012 | | | |
| KIAA1024 | KIAA1024 | | |
| KIAA1033 | KIAA1033 | MRT43, SWIP | |
| KIAA1045 | KIAA1045 | RP11-392A14.4 | |
| KIAA1107 | KIAA1107 | | |
| KIAA1109 | KIAA1109 | FSA, Tweek | |
| KIAA1147 | KIAA1147 | RP5-894A10.2, LCHN, PRO2561 | |
| KIAA1191 | KIAA1191 | p60MONOX | |
| KIAA1199 | | | |
| KIAA1210 | KIAA1210 | RP13-347D8.3 | |
| KIAA1211 | KIAA1211 | | |
| KIAA1217 | KIAA1217 | RP11-324E23.1, SKT | |
| KIAA1239 | | | |
| KIAA1244 | KIAA1244 | RP1-171N11.1, A7322, ARFGEF3, BIG3, C6orf92, PPP1R33, dJ171N11 | |
| KIAA1310 | | | |
| KIAA1324 | KIAA1324 | RP11-352P4.1, EIG121 | |
| KIAA1328 | KIAA1328 | | |
| KIAA1377 | KIAA1377 | | |
| KIAA1383 | | | |
| KIAA1407 | KIAA1407 | | |
| KIAA1430 | | | |
| KIAA1467 | KIAA1467 | | |
| KIAA1486 | | | |
| KIAA1522 | KIAA1522 | | |
| KIAA1529 | | | |
| KIAA1530 | | | |
| KIAA1549 | KIAA1549 | | √ |
| KIAA1598 | KIAA1598 | | |
| KIAA1609 | | | |
| KIAA1632 | | | |
| KIAA1644 | KIAA1644 | LL22NC03-75B3.6 | |

| | | | |
|----------|---|--|--|
| KIAA1671 | KIAA1671 | CTA-221G9.4 | |
| KIAA1704 | | | |
| KIAA1712 | | | |
| KIAA1715 | KIAA1715 | LNP, LNP1, Ul, ulnaless | |
| KIAA1737 | | | |
| KIAA1751 | | | |
| KIAA1804 | Mixed lineage kinase 4 | RP5-862P8.2MLK4, dJ862P8.3 | |
| KIAA1826 | Myo/SANT-like DNA-binding domain containing 4 with coiled coils | DC25, KIAA1826 | |
| KIAA1841 | KIAA1841 | | |
| KIAA1908 | PSMG3 antisense RNA 1 (head to head) | | |
| KIAA1919 | | | |
| KIAA1967 | | | |
| KIAA2018 | KIAA2018 | hCG_1642841 | |
| KIAA2022 | KIAA2022 | RP11-130N24.1, MRX98, XPN | |
| KIF13B | Kinesin family member 13B | GAKIN | |
| KIF16B | Kinesin family member 16B | RP5-971B4.1, C20orf23, KISC20ORF, SNX23 | |
| KIF18A | Kinesin family member 18A | OK/SW-cl.108, MS-KIF18A, PPP1R99 | |
| KIF18B | | | |
| KIF1A | Kinesin family member 1A | ATSV, C2orf20, HSN2C, MRD9, SPG30, UNC104 | |
| KIF1B | Kinesin family member 18B | | |
| KIF20B | Kinesin family member 20B | CT90, KRMP1, MPHOSPH1, MPP-1, MPP1 | |
| KIF21A | Kinesin family member 21A | CFEOM1, FEOM1, FEOM3A | |
| KIF21B | | | |
| KIF22 | Kinesin family member 22 | A-528A3.2, KID, KINSL4, ODF, ODF-1, ODF-2, SEMDHL2 | |
| KIF26B | Kinesin family member 26B | hCG_21329 | |
| KIF2C | Kinesin family member 2C | RP11-269F19.1, CT139, KNSL6, MCAK | |
| KIF3A | Kinesin family member 3A | FLA10, KLP-20 | |
| KIF3B | Kinesin family member 3B | FLA8, HH0048, KLP-11 | |
| KIF5A | Kinesin family member 5A | D12S1889, MY050, NKHC, SPG10 | |
| KIF5C | Kinesin family member 5C | CDCBM2, KINN, NKHC, NKHC-2, NKHC2 | |
| KIF6 | Kinesin family member 6 | KIF1-15/11.4, C00H1102, G1045E3.1, G15711.4, J1189D2.1 | |
| KILLIN | Kinn, p53-regulated DNA replication inhibitor | CWS4, KILLIN | |
| KIN | Kin17 DNA and RNA binding protein | BTC17, Rts2, KIN | |

| | | | |
|---------|---|---|--|
| KIR2DL1 | Kir2 cell immunoglobulin-like receptor, | AA04c-DCX195L8.1, CD156A, KIR-K04, KIR2Z1, | |
| KIR2DL2 | Kir2 cell immunoglobulin-like receptor, | CU407-000.2, CD156B1, CD156b, NKAT-0, NKAT10, | |
| KIR2DL3 | Kir2 cell immunoglobulin-like receptor, | C50404054.1, CD156B2, CD156b, GL183, KIR-0250D, | |
| KIR2DS4 | Kir2 cell immunoglobulin-like receptor, | KIR-K7b, U250H20.5, CD156i, KIRCD3, NKZDS1, | |
| KIR3DS1 | three domains, short extracellular tail 1 | KIR412, KKA2, NKAT-9, NKAT9 | |
| KITLG | KIT ligand | CD158E2, KIR-123FM, KIR-G1, NKAT10 | |
| KITLG | KIT ligand | FPH2, KL-1, Kitl, MGF, SCF, SF, SHEP7 | |
| KL | Klotho | | |
| KLC1 | Kinesin light chain 1 | RP11-73M18.7, KLC, KNS2, KNS2A | |
| KLC4 | Kinesin light chain 4 | KNSL8, bA387M24.3 | |
| KLF11 | Kruppel-like factor 11 | FKLF, FKLF1, MODY7, TIEG2, Tieg3 | |
| KLF12 | Kruppel-like factor 12 | HSPC122, AP-2rep, AP2REP | |
| KLF13 | Kruppel-like factor 13 | BTEB3, FKLF2, NSLP1, RFLAT-1, RFLAT1 | |
| KLF15 | Kruppel-like factor 15 | KKLF | |
| KLF17 | Kruppel-like factor 17 | RP4-675G8.1, ZNF393, Zfp393 | |
| KLF3 | Kruppel-like factor 3 | BKLF | |
| KLF6 | Kruppel-like factor 6 | KP11-184AZ.1, BCD1, CDAT, COPEB, CDB1, CDB1, | |
| KLF6 | Kruppel-like factor 6 | DAG1, ST12, ZF9 | |
| KLF8 | Kruppel-like factor 8 | RP13-1021K9.1, BKLF3, ZNF741 | |
| KLF9 | Kruppel-like factor 9 | BTEB, BTEB1 | |
| KLHDC10 | Kelch domain containing 10 | slim | |
| KLHDC3 | Kelch domain containing 3 | RP1-20C7.3, PEAS, dJ20C7.3 | |
| KLHDC5 | Kelch-like family member 42 | Ctb9, KLHDC5 | |
| KLHDC7A | Kelch domain containing 7A | RP11-422P22.2 | |
| KLHDC8A | Kelch domain containing 8A | | |
| KLHDC8B | Kelch domain containing 8B | FP17659 | |
| KLHL12 | Kelch-like family member 12 | C3IP1, DKIR, hDKIR | |
| KLHL13 | Kelch-like family member 13 | BKLHD2 | |
| KLHL14 | Kelch-like family member 14 | | |
| KLHL15 | Kelch-like family member 15 | HEL-S-305 | |
| KLHL2 | Kelch-like family member 2 | ABP-KELCH, MAV, MAYVEN | |
| KLHL24 | Kelch-like family member 24 | DRE1, KRIP6 | |
| KLHL28 | Kelch-like family member 28 | BTBD5 | |
| KLHL3 | Kelch-like family member 3 | PHA2D | |
| KLHL30 | Kelch-like family member 30 | Chromosome 2, NC_000002.12 (238138722..238152906) | |

| | | | |
|-----------|---|---|---|
| KLHL31 | Kelch-like family member 31 | BKLHD6, KBTBD1, KLHL, bA345L23.2 | |
| KLHL32 | Kelch-like family member 32 | KLHL32, BKLHD3, KIAA1900, UG00501103, J121E7.1 | |
| KLHL35 | Kelch-like family member 35 | | |
| KLHL4 | Kelch-like family member 4 | DKELCHL, KHL4 | |
| KLHL5 | Kelch-like family member 5 | | |
| KLHL6 | Kelch-like family member 6 | | |
| KLHL7 | Kelch-like family member 7 | KLHL6, SBBI26 | |
| KLK13 | Kallikrein-related peptidase 13 | KLK-L4, KLKL4 | |
| KLK2 | Kallikrein-related peptidase 2 | KLK2A2, hGK-1, hK2 | v |
| KLK5 | Kallikrein-related peptidase 5 | UNQ570/PRO1132, KLK-L2, KLKL2, SCTE | |
| KLK7 | Kallikrein-related peptidase 7 | PRSS6, SCCE, hK7 | |
| KLRF1 | Killer cell lectin-like receptor subfamily 1, member 1 | CLEC5C, NKp80 | |
| KMO | Kynurenine 3-monooxygenase (kynurenine 3-monooxygenase) | RP1-317G22.1, dJ317G22.1 | |
| KPNA1 | Karyopherin alpha 1 (importin alpha 5) | IPOA5, NPI-1, RCH2, SRP1 | |
| KPNA3 | Karyopherin alpha 3 (importin alpha 4) | KPNA3, IPOA4, SRP1, SRP1gamma, SRP4, LSPD1 | |
| KPNA4 | Karyopherin alpha 4 (importin alpha 3) | IPOA3, QIP1, SRP3 | |
| KPNA6 | Karyopherin alpha 6 (importin alpha 7) | RP4-622L5.1, IPOA7, KPNA7 | |
| KPNB1 | Karyopherin (importin) beta 1 | IMB1, IPO1, IPOB, Impnb, NTF97 | |
| KPRP | Keratinocyte proline-rich protein | C1orf45 | |
| KRAS | Kirsten rat sarcoma viral oncogene homolog | K-RAS, C1C2, K-RAS2A, K-RAS2B, K-RAS4A, K-RAS4B, K-RAS4C, K-RAS4D, NS-NS2, RAS2, RAS4 | v |
| KREMEN1 | Kringle containing transmembrane protein 1 | CTA-57G9.2, KREMEN, KRM1 | |
| KRIT1 | KRIT1, ankyrin repeat containing | CAM, CCM1 | |
| KRR1 | KRR1, small subunit (55S) processome component, homolog (yeast) | HRB2, RIP-1 | |
| KRT12 | Keratin 12 | K12 | |
| KRT2 | Keratin 2 | CK-2e, K2eA, KRT2E, KRTE, KRT2 | |
| KRT37 | Keratin 37 | HA7, K37, KRTHA7 | |
| KRT5 | Keratin 5 | CK5, DDD, DDD1, EBS2, K5A, KRT5 | |
| KRT6B | Keratin 6B | CK-6B, CK6B, K6B, KRTL1, PC2, PC4 | |
| KRT75 | Keratin 75 | K6HF, KB18, PFB | |
| KRT77 | Keratin 77 | K1B, KRT1B | |
| KRT82 | Keratin 82 | HB2, Hb-2, KRTHB2 | |
| KRT86 | Keratin 86 | HB6, Hb1, KRTHB1, KRTHB6, MNX, hHb6 | |
| KRTAP11-1 | Keratin associated protein 11-1 | HACL-1, HACL1, KAP11.1 | |

| | | | |
|-----------|---|---|---|
| KRTAP12-2 | Keratin associated protein 12-2 | KAP12.2, KRTAP12.2 | |
| KRTAP13-2 | Keratin associated protein 13-2 | KAP13-2 | |
| KRTAP2-4 | Keratin associated protein 2-4 | hCG_1645697, KAP2.1B, KAP2.4, KRTAP2.4 | |
| KRTAP26-1 | Keratin associated protein 26-1 | | |
| KRTAP4-5 | Keratin associated protein 4-5 | KAP4.5, KRTAP4.5 | |
| KRTAP5-11 | Keratin associated protein 5-11 | KRTAP5-5, KRTAP5-6, KRTAP5.11 | |
| KRTAP5-2 | Keratin associated protein 5-2 | KRTAP5-8, KRTAP5.2 | |
| KRTCAP2 | Keratinocyte associated protein 2 | KCP2 | |
| KSR1 | Kinase suppressor of ras 1 | KSR, RSU2 | |
| KSR2 | Kinase suppressor of ras 2 | | |
| KTELC1 | Protein O-glucosyltransferase 1 | MDS010, C30H9, CLF40, KDELC1, KTELC1, MDSRB, Pami, KCLD46 | |
| KY | Kyphoscoliosis peptidase | | |
| L1CAM | L1 cell adhesion molecule | CAMLE1, CDT11, HSAS, HSAS1, MASA, MIC3, N-CAM11, NCAM1, NCAM11, S10, SPG1 | |
| L2HGDH | L-2-hydroxyglutarate dehydrogenase | C14orf160 | |
| L3MBTL | L(3)mbt-like 1 (Drosophila) | RP11-138B7.1, H-L(3)MBT1, L3MBTL, ZC2H13, JH38B7.2 | |
| L3MBTL3 | L(3)mbt-like 3 (Drosophila) | RP11-7306.1, MBT-1, MBT1 | |
| L3MBTL4 | L(3)mbt-like 4 (Drosophila) | HsT1031 | |
| LACE1 | Lactation elevated | RP3-479O19.1, AFG1 | |
| LACTB | Lactamase, beta | UNQ843/PRO1781, G24, MRPL56 | |
| LAD1 | Ladinin 1 | LadA | |
| LAMA3 | Laminin, alpha 3 | BM600, E170, LAMNA, LOCS, lama3a | |
| LAMC1 | Laminin, gamma 1 | RP11-181K3.1, LAMB2 | |
| LAMC2 | Laminin, gamma 2 | B2T, BM600, CSF, EBR2, EBR2A, LAMB2T, LAMNB2 | |
| LAMP2 | Lysosomal-associated membrane protein 2 | CD107b, LAMP-2, LAMPB, LGP110 | |
| LANCL2 | Vancomycin antibiotic synthetase component C-like 2 | tcag7.697, GPR69B, TASP | |
| LANCL3 | Vancomycin antibiotic synthetase component C-like 3 | | |
| LAPTM4B | Lysosomal protein transmembrane 4 beta | PSEC0001, LAPTM4beta, LC27 | |
| LAPTM5 | Lysosomal protein transmembrane 5 | RP5-1166H10.3, CLAST6 | |
| LARP1B | Laribonucleoprotein domain family, member 1B | LARP2 | |
| LARP4 | Laribonucleoprotein domain family, member 4B | PP13296 | |
| LARP4B | Laribonucleoprotein domain family, member 4B | P11-164C1.3, KIAA0217, LARP5 | |
| LAS1L | LAS1-like (S. cerevisiae) | RP3-475B7.2, Las1-like, dJ475B7.2 | |
| LASP1 | LIM and SH3 protein 1 | Lasp-1, MLN50 | v |

| | | | |
|----------|---|---|---|
| LASS3 | | | |
| LASS6 | | | |
| LAT2 | Linker for activation of T cells family, member 2 | HSPC046, LAB, NTAL, WBSCR15, WBSCR5, WSCR5 | |
| LATS2 | Large tumor suppressor kinase 2 | KPM | |
| LAX1 | Lymphocyte transmembrane adaptor 1 | LAX | |
| LBR | Lamin B receptor | PRO0650, DHCR14B, LMN2R, PHA, TDRD18 | |
| LCE2B | Late cornified envelope 2B | LEP10, SPRL1B, XP5 | |
| LCLAT1 | Lysocardiolipin acyltransferase 1 | UNQ1849/PRO9575, TAGFAT8, ACPAT8, ALCAT1, HSPC1840, LYCAT, UNQ1840 | |
| LCMT1 | Leucine carboxyl methyltransferase 1 | CGI-68, LCMT, PPMT1 | |
| LCOR | Ligand dependent nuclear receptor | MLR2 | |
| LCORL | Ligand dependent nuclear receptor | MLR1 | |
| LCP1 | Lymphocyte cytosolic protein 1 (L-plastin) | NP11-159114.1, CP04, HLL-5-57, L-PLASTIN, LC041, LPL, PLS2 | v |
| LCTL | Lactase-like | UNQ3022/PRO9820, KLG, KLPH | |
| LDB1 | LIM domain binding 1 | CLIM2, NLI | |
| LDB3 | LIM domain binding 3 | CMDFC, CMFDS, CPTIERZ1, LDB3Z4, LVNCS, MEM4, ORACLE, PDLIM6, ZASB, LDB2 | |
| LDHAL6A | Lactate dehydrogenase A-like 6A | LDH6A | |
| LDHC | Lactate dehydrogenase C | CT32, LDH3, LDHX | |
| LDLR | Low density lipoprotein receptor | FH, FHC, LDLCQ2 | |
| LDLRAP1 | Low density lipoprotein receptor adaptor protein 1 | RP11-70P17.2, ARH, ARH1, ARH2, FHCB1, FHCB2 | |
| LEAP2 | Liver expressed antimicrobial peptide 2 | LEAP-2 | |
| LEFTY2 | Left-right determination factor 2 | PSEC0024, EBAF, LEFTA, LEFTYA, TGFB4 | |
| LEKR1 | Leucine, glutamate and lysine rich 1 | | |
| LEMD3 | LEM domain containing 3 | MAN1 | |
| LEP | Leptin | LEPD, OB, OBS | |
| LEPR | Leptin receptor | CD295, LEP-RD, OB-R, OBR, LEPR | |
| LEPRE1 | Leucine prone-enriched proteoglycan (leprecan)-1 | P3H1 | |
| LEPREL1 | Leprecan-like 1 | MCVD, MLAT4, P3H2 | |
| LEPROTL1 | Leptin receptor overlapping transcript-like 1 | My047, HSPC112, Vps55, my047 | |
| LGALS12 | Lectin, galactoside-binding, soluble, 12 | GAL12, GRIP1 | |
| LGI1 | Leucine-rich, glioma inactivated 1 | UNQ775/PRO1509, ADLTE, ADFAE1, ADFAE1, EPITEMBIN, EPT, ETL1, IR1000 | |
| LGI2 | Leucine-rich repeat LGI family, member 2 | LGIL2 | |
| LGR5 | Leucine-rich repeat containing G protein-coupled receptor 5 | FEX, GPR49, GPR67, GRP49, HG38 | |
| LHCGR | Luteinizing hormone/chorionic gonadotropin receptor | HHG, LCGR, LGRZ, LHCG-R, LHCGR, LHR, LHHR, LSHR, LHCF | |

| | | | |
|-----------------|--|---|---|
| LHFPL3 | Lipoma HMGIC fusion partner-like 3 | LHFPL4 | |
| LHX3 | LIM homeobox 3 | CPHD3, LIM3, M2-LHX3 | |
| LHX6 | LIM homeobox 6 | RP23-169L4.3.1, Lhx6 | |
| LHX8 | LIM homeobox 8 | LHX7 | |
| LHX9 | LIM homeobox 9 | RP11-255O17.2 | |
| LIF | Leukemia inhibitory factor | CDF, DIA, HILDA, MLPLI | |
| LIFR | Leukemia inhibitory factor receptor alpha | CD118, LIF-R, SJS2, STWS, SWS | v |
| LIG4 | Ligase IV, DNA, ATP-dependent | LIG4S | |
| LILRA1 | Leukocyte immunoglobulin-like receptor, subfamily A (with TM and ITIM domains) | XXbac-BCX85G21.3, CD85I, LIR-6, LIR6 | |
| LILRB1 | Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains) | XXbac-BCX85G21.4, CD85J, IL1-2, IL12, LIR-1, LIR1, MIP-7, MIP7 | |
| LILRB2 | Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains) | XXbac-BCX105G0.12-005, CD85D, IL1-4, IL14, LIR-2, LIR2 | |
| LILRB3 | Leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains) | XXbac-BCX105G0.10, CD85A, IL1-3, IL13, LILRA6, LIR-3, LIR3, IRP | |
| LILRP2 | | | |
| LIMCH1 | LIM and calponin homology domains 1 | LIMCH1A, LMO7B | |
| LIMD1 | LIM domains containing 1 | LIMK, LIMK-1 | |
| LIMK1 | LIM domain kinase 1 | | |
| LIMK2 | LIM domain kinase 2 | | |
| LIMS1 | LIM and senescent cell antigen-like domains 1 | PINCH, PINCH-1, PINCH1 | |
| LIMS3 | LIM and senescent cell antigen-like domains 3 | PINCH-3 | |
| LIMS3-LOC440895 | LIM and senescent cell antigen-like domains 3 | PINCH-3 | |
| LIN28A | Lin-28 homolog A (<i>C. elegans</i>) | CSDD1, LIN-28, LIN28, ZCCHC1, lin-28A | |
| LIN28B | Lin-28 homolog B (<i>C. elegans</i>) | RP3-522O2.2, CSDD2 | |
| LIN52 | | | |
| LIN54 | LIN-54 DREAM MuvB core complex | CXCDC1, JC8.6, MIP120 | |
| LIN7C | 5-hydroxytryptamine (serotonin) receptor 2C, G-protein-coupled | RP11-810O3.1, 5-HT2C, 5-HTR2C, 5HTR2C, HTR1C | |
| LIPF | Lipase, gastric | RP11-186O14.1, GL, HGL, HLAL | |
| LIPG | Lipase, endothelial | UNQ387/PRO719, EDL, EL, PRO719 | |
| LIX1 | | | |
| LLPH | | | |
| LMAN1 | Lectin, mannose-binding, 1 | ERGIC-53, ERGIC53, F5F8D, FMFD1, MCFD1, MR60, gp58 | |
| LMBR1 | Limb development membrane protein 1 | tcag7.573, ACHP, C7orf2, DIF14, PPD2, TPT, ZRS | |
| LMBR1L | Limb development membrane protein 1-like | UNQ458/PRO783, LMR | |
| LMBRD1 | LMBR1 domain containing 1 | BM-021, C6orf209, LMBD1, MAHCF, NESI | |

| | | | |
|--------------|--|---|---|
| LMBRD2 | LMBR1 domain containing 2 | | |
| LMCD1 | LIM and cysteine-rich domains 1 | | |
| LMNA | Lamin A/C | RP11-341H9.1, CDCD1, CDDC, CMD1A, CMT2B1, FMD2, EPL, EPLD, EPLD2, IGFBP, IDC, LDB1, LEP | |
| LMO1 | LIM domain only 1 (rhombotin 1) | RBTN1, RHOM1, TTG1 | v |
| LMO3 | LIM domain only 3 (rhombotin-like 2) | RBTN3, RBTN2, RHOM3, Rhom-3 | |
| LMO4 | LIM domain only 4 | | |
| LMO7 | LIM domain 7 | RP11-332E3.2, FBX20, FBXO20, LOMP | |
| LMOD1 | Leiomodin 1 (smooth muscle) | 1D, 64kD, D1, SM-LMOD | |
| LMOD3 | leiomodin 3 (fetal) | | |
| LMTK2 | | | |
| LMX1A | LIM homeobox transcription factor 1, alpha | LMX1, LMX1.1 | |
| LMX1B | LIM homeobox transcription factor 1, beta | RP11-489N22.3, LMX1.2, NPS1 | |
| LNPEP | Leucyl/cystinyl aminopeptidase | CAP, IRAP, P-LAP, PLAP | |
| LNX2 | Ligand of numb-protein X 2 | PDZRN1 | |
| LOC100049716 | Uncharacterized LOC100049716 | | |
| LOC100093631 | General transcription factor II, i, pseudogene | | |
| LOC100124692 | | | |
| LOC100125556 | | | |
| LOC100125918 | Uncharacterized LOC100125918 | | |
| LOC100128025 | | | |
| LOC100128098 | | | |
| LOC100128239 | Uncharacterized LOC100128239 | | |
| LOC100128264 | | | |
| LOC100128292 | | | |
| LOC100128338 | | | |
| LOC100128554 | Uncharacterized LOC100128554 | RP5-944M2.3 | |
| LOC100128560 | | | |
| LOC100128811 | | | |
| LOC100129034 | Uncharacterized LOC100129034 | | |
| LOC100129055 | Cyclin Y-like 1 pseudogene | | |
| LOC100129066 | | | |
| LOC100129195 | | | |
| LOC100129250 | | | |

| | | | |
|--------------|-------------------------------------|-------------|--|
| LOC100129387 | | | |
| LOC100129503 | | | |
| LOC100129550 | Uncharacterized LOC100129550 | | |
| LOC100129620 | Uncharacterized LOC100129620 | | |
| LOC100129662 | | | |
| LOC100129716 | | | |
| LOC100129794 | | | |
| LOC100129826 | Uncharacterized LOC100129826 | | |
| LOC100129940 | Uncharacterized LOC100129940 | | |
| LOC100129995 | | | |
| LOC100130000 | | | |
| LOC100130148 | | | |
| LOC100130283 | Uncharacterized LOC100130283 | | |
| LOC100130386 | | | |
| LOC100130522 | | | |
| LOC100130894 | | | |
| LOC100130954 | | | |
| LOC100131132 | Uncharacterized LOC100131132 | | |
| LOC100131190 | Uncharacterized LOC100131190 | | |
| LOC100131347 | RAD52 motif containing 1 pseudogene | | |
| LOC100131496 | Uncharacterized LOC100131496 | | |
| LOC100132111 | Uncharacterized LOC100132111 | | |
| LOC100132352 | FSHD region gene 1 pseudogene | | |
| LOC100132354 | | | |
| LOC100132618 | | | |
| LOC100132707 | | | |
| LOC100132724 | | | |
| LOC100132735 | Uncharacterized LOC100132735 | | |
| LOC100132832 | | | |
| LOC100133029 | Sirtuin 5 pseudogene | RP4-609E1.2 | |
| LOC100133091 | Uncharacterized LOC100133091 | | |
| LOC100133469 | | | |
| LOC100133612 | | | |

| | | | |
|--------------|------------------------------|--|--|
| LOC100134229 | | | |
| LOC100134259 | | | |
| LOC100134368 | Uncharacterized LOC100134368 | | |
| LOC100134445 | Uncharacterized LOC100134445 | | |
| LOC100134868 | Uncharacterized LOC100134868 | | |
| LOC100189589 | | | |
| LOC100216479 | | | |
| LOC100270804 | Uncharacterized LOC100270804 | | |
| LOC100271831 | Uncharacterized LOC100271831 | | |
| LOC100271832 | Uncharacterized LOC100271832 | | |
| LOC100272228 | | | |
| LOC100286844 | | | |
| LOC100288644 | Uncharacterized LOC100288644 | | |
| LOC100289602 | | | |
| LOC100302401 | | | |
| LOC100302652 | | | |
| LOC121838 | | | |
| LOC121952 | | | |
| LOC134466 | | | |
| LOC144486 | | | |
| LOC144571 | | | |
| LOC144920 | | | |
| LOC147004 | Uncharacterized LOC147004 | | |
| LOC147670 | | | |
| LOC147804 | | | |
| LOC148145 | | | |
| LOC148413 | Uncharacterized LOC148413 | | |
| LOC149134 | | | |
| LOC149773 | | | |
| LOC150622 | | | |
| LOC151162 | Hypothetical LOC151162 | | |
| LOC151300 | | | |
| LOC151484 | Uncharacterized LOC151484 | | |

| | | | |
|-----------|---------------------------|---------------|--|
| LOC151534 | | | |
| LOC152225 | Uncharacterized LOC152225 | RP11-221J22.1 | |
| LOC152742 | | | |
| LOC153328 | | | |
| LOC153684 | Uncharacterized LOC153684 | | |
| LOC154092 | | | |
| LOC154822 | | | |
| LOC157273 | Uncharacterized LOC157273 | | |
| LOC158381 | | | |
| LOC162632 | | | |
| LOC221442 | | | |
| LOC221710 | | | |
| LOC221946 | Uncharacterized LOC221946 | | |
| LOC253044 | Uncharacterized LOC253044 | | |
| LOC253724 | | | |
| LOC254099 | | | |
| LOC255167 | | | |
| LOC255187 | Uncharacterized LOC255187 | hCG_1980447 | |
| LOC256880 | Uncharacterized LOC256880 | RP11-15B17.1 | |
| LOC257358 | | | |
| LOC283070 | Uncharacterized LOC283070 | | |
| LOC283267 | | | |
| LOC283392 | | | |
| LOC283404 | | | |
| LOC283508 | Uncharacterized LOC283508 | | |
| LOC283585 | Uncharacterized LOC283585 | | |
| LOC283663 | | | |
| LOC283731 | Uncharacterized LOC283731 | | |
| LOC283887 | Uncharacterized LOC283887 | | |
| LOC283914 | Uncharacterized LOC283914 | | |
| LOC284294 | Uncharacterized LOC284294 | | |
| LOC284408 | | | |
| LOC284551 | | | |

| | | | |
|-----------|--|-------------|--|
| LOC284561 | Uncharacterized LOC284561 | | |
| LOC284577 | Uncharacterized LOC284577 | | |
| LOC284581 | Uncharacterized LOC284581 | | |
| LOC284632 | Uncharacterized LOC284632 | | |
| LOC284661 | Uncharacterized LOC284661 | | |
| LOC284749 | | | |
| LOC284861 | | | |
| LOC284900 | | | |
| LOC284926 | Uncharacterized LOC284926 | | |
| LOC285026 | | | |
| LOC285045 | | | |
| LOC285074 | Anaphase promoting complex subunit 1 pseudogene | | |
| LOC285359 | | | |
| LOC285401 | | | |
| LOC285500 | Uncharacterized LOC285500 | | |
| LOC285501 | | | |
| LOC285505 | Uncharacterized LOC285505 | | |
| LOC285547 | | | |
| LOC285548 | | | |
| LOC285556 | Uncharacterized LOC285556 | | |
| LOC285593 | Uncharacterized LOC285593 | | |
| LOC285735 | | | |
| LOC285778 | | | |
| LOC285812 | Uncharacterized LOC285812 | | |
| LOC285954 | | | |
| LOC285965 | | | |
| LOC286094 | Uncharacterized LOC286094 | | |
| LOC286135 | | | |
| LOC286184 | | | |
| LOC286238 | Uncharacterized LOC286238 | RP13-60M5.2 | |
| LOC286299 | | | |
| LOC286367 | | | |
| LOC29034 | | | |

| | | | |
|-----------|--|--|--|
| LOC338651 | | | |
| LOC338797 | Uncharacterized LOC338797 | | |
| LOC338864 | | | |
| LOC339166 | Uncharacterized LOC339166 | | |
| LOC339240 | | | |
| LOC339290 | | | |
| LOC339400 | | | |
| LOC339524 | | | |
| LOC339539 | Uncharacterized LOC339539 | | |
| LOC339926 | | | |
| LOC340094 | | | |
| LOC340113 | Uncharacterized LOC340113 | | |
| LOC340544 | | | |
| LOC344887 | FNIII-A-like family domain containing 1 pseudogene | | |
| LOC345643 | | | |
| LOC349114 | | | |
| LOC360030 | | | |
| LOC374443 | C-type lectin domain family 2, member D pseudogene | | |
| LOC387647 | | | |
| LOC387693 | | | |
| LOC388692 | Uncharacterized LOC388692 | | |
| LOC388889 | | | |
| LOC388906 | | | |
| LOC388955 | PKLEL domain-containing protein 1, mitochondrial pseudogene | | |
| LOC389043 | | | |
| LOC389705 | Chromosome 4 open reading frame 27 pseudogene | | |
| LOC389791 | | | |
| LOC400238 | | | |
| LOC400553 | Uncharacterized LOC400553 | | |
| LOC400568 | Uncharacterized LOC400568 | | |
| LOC400604 | | | |
| LOC400622 | Uncharacterized LOC400622 | | |
| LOC400707 | Uncharacterized LOC400707 | | |

| | | | |
|-----------|--|--|--|
| LOC400768 | Uncharacterized LOC400768 | | |
| LOC400804 | | | |
| LOC400940 | Uncharacterized LOC400940 | | |
| LOC401093 | | | |
| LOC401317 | Uncharacterized LOC401317 | | |
| LOC401463 | Uncharacterized LOC401463 | | |
| LOC401588 | | | |
| LOC440288 | | | |
| LOC440419 | | | |
| LOC440792 | Formate dehydrogenase (oxidase) 1 pseudogene | | |
| LOC440993 | | | |
| LOC441046 | | | |
| LOC441259 | Postmitotic segregation increased 2 pseudogene | | |
| LOC441493 | | | |
| LOC442308 | | | |
| LOC442421 | | | |
| LOC503519 | | | |
| LOC554223 | Histocompatibility antigen-related | | |
| LOC572558 | | | |
| LOC613126 | | | |
| LOC613266 | Uncharacterized LOC613266 | | |
| LOC63930 | Uncharacterized LOC63930 | | |
| LOC641298 | | | |
| LOC641364 | | | |
| LOC641367 | Cyclin Y-like 1 pseudogene | | |
| LOC641515 | Alpha-1,5-mannosyl-glycoprotein 4-beta-N- acetylhexosaminyltransferase-like protein | | |
| LOC642597 | | | |
| LOC642826 | | | |
| LOC642852 | Uncharacterized LOC642852 | | |
| LOC643327 | Uncharacterized LOC643327 | | |
| LOC643387 | AR DNA binding protein pseudogene | | |
| LOC643406 | Uncharacterized LOC643406 | | |
| LOC643648 | | | |

| | | | |
|-----------|---|--|--|
| LOC643749 | | | |
| LOC643763 | | | |
| LOC643837 | | | |
| LOC643955 | | | |
| LOC644248 | | | |
| LOC645166 | Lymphocyte-specific protein 1 pseudogene | | |
| LOC645195 | Uncharacterized LOC645195 | | |
| LOC645332 | | | |
| LOC645513 | Uncharacterized LOC645513 | | |
| LOC646168 | | | |
| LOC646241 | Uncharacterized LOC646241 | | |
| LOC646736 | Uncharacterized LOC646736 | | |
| LOC646813 | DEAF1 (Asp-Glu-Ala-His) box nuclease 9 pseudogene | | |
| LOC646851 | | | |
| LOC646999 | Akirin 1 pseudogene | | |
| LOC647121 | | | |
| LOC647589 | | | |
| LOC647979 | | | |
| LOC650368 | | | |
| LOC650623 | | | |
| LOC651250 | | | |
| LOC652276 | Potassium channel tetramerization domain containing 5 pseudogene | | |
| LOC653391 | | | |
| LOC654433 | | | |
| LOC654780 | | | |
| LOC677759 | | | |
| LOC727726 | | | |
| LOC727896 | Cysteine and histidine-rich domain (CHORD) containing 1 pseudogene | | |
| LOC727924 | Uncharacterized LOC727924 | | |
| LOC728095 | | | |
| LOC728142 | | | |
| LOC728192 | | | |
| LOC728208 | Uncharacterized LOC728208 | | |

| | | | |
|-----------|--|-------------|--|
| LOC728264 | | | |
| LOC728276 | | | |
| LOC728342 | | | |
| LOC728377 | | | |
| LOC728392 | Uncharacterized LOC728392 | | |
| LOC728640 | | | |
| LOC728660 | Uncharacterized LOC728660 | | |
| LOC728723 | | | |
| LOC728819 | HCG1645220 | hCG_1645220 | |
| LOC729013 | | | |
| LOC729082 | | | |
| LOC729218 | | | |
| LOC729444 | | | |
| LOC729678 | | | |
| LOC729739 | Peptidylprolyl isomerase A (cyclophilin A) pseudogene | | |
| LOC729799 | | | |
| LOC729862 | | | |
| LOC730101 | Uncharacterized LOC730101 | | |
| LOC730668 | Dynein heavy chain -like pseudogene | | |
| LOC730811 | | | |
| LOC731789 | | | |
| LOC80054 | | | |
| LOC80154 | | | |
| LOC81691 | Exonuclease NEF-sp | 44M2.3 | |
| LOC84740 | | | |
| LOC84856 | | | |
| LOC90246 | Uncharacterized LOC90246 | | |
| LOC90586 | | | |
| LOC93622 | MOH4 family associated protein 1-like 1 pseudogene | | |
| LOC96610 | | | |
| LOH12CR1 | Loss of heterozygosity, 12, Chromosomal region 1 | | |
| LOH3CR2A | | | |
| LONRF1 | LOH peptidease N-terminal domain and ring finger 1 | RNF191 | |

| | | | |
|--------|---|--|---|
| LONRF2 | ECN peptidase N-terminal domain and ring | RNF192 | |
| LONRF3 | ECN peptidase N-terminal domain and ring | RP13-347D8.4, RNF127 | |
| LOX | Lysyl oxidase | | |
| LOXL2 | Lysyl oxidase-like 2 | LOR2, WS9-14 | |
| LPAR1 | Lysophosphatidic acid receptor 1 | RP11-104M22.2, EDG2, GPR20, GPCR20, LPAT, Muc12, VZG1, Gpr12, gpr12, gpr12 | |
| LPCAT1 | Lysophosphatidylcholine acyltransferase 1 | AYTL2, PFAAP3, lpcat | |
| LPCAT2 | Lysophosphatidylcholine acyltransferase 2 | AYTL1, LysoPAFAT | |
| LPGAT1 | Lysophosphatidylglycerol acyltransferase 1 | FAM34A, FAM34A1, NET8 | |
| LPHN3 | Latrophilin 3 | CIRL3, LEC3 | |
| LPIN1 | Lipin 1 | PAP1 | |
| LPL | Lipoprotein lipase | HDLCQ11, LIPD | |
| LPP | Lipid domain containing protein | | v |
| LPPR1 | Lipid phosphate phosphatase-related protein 1 | RP11-35N6.1PRG-3 | |
| LPPR4 | Lipid phosphate phosphatase-related protein 4 | RP4-788L13.1LPR4, PHP1, PRG-1, PRG1 | |
| LPPR5 | Lipid phosphate phosphatase-related protein 5 | PAP2PAP2D, PRG5 | |
| LRAT | lecithin retinol acyltransferase | LCA14 | |
| LRBA | leucine-rich repeat containing, beach | BGL, CDC4L, CVID8, LAB300, LBA | |
| LRCH1 | leucine-rich repeats and carboxin homology | RP11-147L20.3, CHDC1, NP81 | |
| LRFN2 | leucine-rich repeat and fibronectin type III | RP11-535K1.2, FIGLER2, KIAA1246, SALM1 | |
| LRGUK | leucine-rich repeats and guanylate kinase | | |
| LRIG1 | leucine-rich repeats and immunoglobulin- | LIG-1, LIG1 | |
| LRP1 | low density lipoprotein receptor-related | AZMK, AFOLK, ATR, CD91, IGFBP5K, LRTA, TCERF5, LRP1 | |
| LRP11 | low density lipoprotein receptor-related | RP11-350J20.11-002, MANSC3, bA350J20.3 | |
| LRP12 | low density lipoprotein receptor-related | ST7 | |
| LRP2 | low density lipoprotein receptor-related | DBS, GP330 | |
| LRP2BP | LRP2 binding protein | | |
| LRP4 | low density lipoprotein receptor-related | CLSS, LRP-4, LRP10, MEGF7, SOST2 | |
| LRP6 | low density lipoprotein receptor-related | ADCAD2 | |
| LRP8 | low density lipoprotein receptor-related | RP5-1024G6.8, APOER2, HSZ75190, LRP-8, MCI1 | |
| LRPPRC | leucine-rich pentapeptide repeat | CLONE-23970, GP130, LRP130, LSFC | |
| LRRC1 | Leucine rich repeat containing 1 | RP3-523E19.1, LANO, dJ523E19.1 | |
| LRRC10 | Leucine rich repeat containing 10 | HRLRRPA, LRRC10 | |
| LRRC14 | Leucine rich repeat containing 14 | LRRC14A | |

| | | | |
|----------|--|---|--|
| LRRC15 | Leucine rich repeat containing 15 | LIB | |
| LRRC17 | Leucine rich repeat containing 17 | UNQ3076/PRO9909, P37NB | |
| LRRC2 | Leucine rich repeat containing 2 | | |
| LRRC27 | Leucine rich repeat containing 27 | RP11-273H7.2 | |
| LRRC32 | Leucine rich repeat containing 32 | D11S833E, GARP | |
| LRRC34 | Leucine rich repeat containing 34 | | |
| LRRC37A2 | Leucine rich repeat containing 37, member A2 | LRRC37 | |
| LRRC37A4 | Leucine rich repeat containing 37, member A4 | LRRC37A4 | |
| LRRC37B2 | Leucine rich repeat containing 37B2 | LRRC37B2 | |
| LRRC4 | Leucine rich repeat containing 4 | NAG14, NGL-2 | |
| LRRC43 | Leucine rich repeat containing 43 | | |
| LRRC48 | Leucine rich repeat containing 48 | | |
| LRRC55 | Leucine rich repeat containing 55 | | |
| LRRC57 | Leucine rich repeat containing 57 | | |
| LRRC58 | Leucine rich repeat containing 58 | | |
| LRRC8A | Leucine rich repeat containing 8 family, member A | RP11-101E3.3, AGM5, LRRC8 | |
| LRRC8C | Leucine rich repeat containing 8 family, member C | AD158, FAD158 | |
| LRRC8D | Leucine rich repeat containing 8 family, member D | RP11-302M6.1, LRRC5 | |
| LRRC9 | Leucine rich repeat containing 9 | | |
| LRCC1 | Leucine rich repeat and coiled-coil domain containing 1 | CLERC, SAP2, VFL1 | |
| LRRFIP1 | Leucine rich repeat (in FHL) interacting protein 1 | FLAP-1, FLAP1, FLIAP1, GCF-2, GCF2, HUF1-1, TRIP1 | |
| LRRFIP2 | Leucine rich repeat (in FHL) interacting protein 2 | HUF1-2 | |
| LRRK1 | Leucine-rich repeat kinase 1 | RIPK6, Roco1 | |
| LRRK2 | Leucine-rich repeat kinase 2 | AURA17, DARDARIN, PARK8, RIPK7, ROCO2 | |
| LRRN1 | Leucine rich repeat neuronal 1 | Nbla10449, FIGLER3, NLRR-1 | |
| LRRTM4 | Leucine rich repeat transmembrane neuronal 4 | UNQ3075/PRO9907 | |
| LSG1 | Large 60S subunit nuclear export GTPase 1 | | |
| LSM14A | LSM14A, SCD6 homolog A (<i>S. cerevisiae</i>) | C19orf13, FAM61A, RAP55, RAP55A | |
| LTBP2 | Latent transforming growth factor beta binding protein 2 | C14orf141, GLC3D, LTBP3, MSPKA, MSTP031, WMS3 | |
| LTBP4 | Latent transforming growth factor beta binding protein 4 | ARCL1C, LTBP-4L, LTBP4S,LTBP4 | |
| LTV1 | LTV1 ribosome biogenesis factor | C6orf93, dJ468K18.4 | |
| LUC7L2 | LUC7-like 2 (<i>S. cerevisiae</i>) | CGI-59, CGI-74, LUC7B2 | |
| LUC7L3 | LUC7-like 3 (<i>S. cerevisiae</i>) | CRA, CREAP-1, CROP, LUC7A, OA48-18, hLuc7A | |

| | | | |
|---------|---|---|---|
| LUZP1 | Leucine zipper protein 1 | RP1-184J9.3, LUZP | |
| LUZP2 | Leucine zipper protein 2 | UNQ2566/PRO6246, KFSP2566, PRO6246 | |
| LY75 | Lymphocyte antigen 75 | CD205, CLEC13B, DEC-205, GP200-MR6, LY-75 | |
| LY86 | Lymphocyte antigen 86 | RP1-80N2.1, MD-1, MMD-1, dJ80N2.1 | |
| LYG2 | Lysozyme G-like 2 | LYGH | |
| LYPD5 | LY6/PLAUR domain containing 5 | UNQ1908/PRO4356, PRO4356 | |
| LYPD6 | LY6/PLAUR domain containing 6 | UNQ3023/PRO9821 | |
| LYPLA2 | Lysophospholipase II | RP5-886K2.5, APT-2, DJ886K2.4 | |
| LYRM1 | LYR motif containing 1 | A211C6.1 | |
| LYRM2 | LYR motif containing 2 | DJ122O8.2 | |
| LYRM5 | LYR motif containing 5 | | |
| LYRM7 | LYR motif containing 7 | C5orf31, MC3DN8, MZM1L | |
| LYSMD2 | Lysmi, putative peptidoglycan-binding, domain containing 2 | | |
| LYSMD3 | Lysmi, putative peptidoglycan-binding, domain containing 3 | | |
| LYSMD4 | Lysmi, putative peptidoglycan-binding, domain containing 4 | | |
| LYST | Lysosomal trafficking regulator | CHS, CHS1 | |
| LYZL1 | Lysozyme-like 1 | UNQ048/PRO1278, KAAG048, LTC2, PRO1278, LA524C20.1 | |
| LYZL2 | Lysozyme-like 2 | | |
| LZTFL1 | Leucine zipper transcription factor-like 1 | BBS17 | |
| LZTS1 | Leucine zipper, putative tumor suppressor 1 | F37, FEZ1 | |
| MAB21L2 | Mab-21-like 2 (<i>C. elegans</i>) | MCOPS14 | |
| MACC1 | Metastasis associated in colon cancer 1 | 7A5, SH3BP4L | |
| MACF1 | Microtubule-actin crosslinking factor 1 | ABP620, ACF7, MACF, OFC4 | |
| MACROD2 | MACRO domain containing 2 | RP11-189J1.1, C20orf133 | |
| MAD2L1 | MAD2 mitotic arrest deficient-like 1 | HSMAD2, MAD2 | |
| MADD | MAP-kinase activating death domain | DENN, IG20, RAB3GEP | |
| MAEA | Macrophage erythroblast attacher | HLC10, EMLP, EMP, GID9, HLC-10, PIG5 | |
| MAEL | Macronuclear spermatozoan transposon | RP11-102C16.1, CT128, SPATA35 | |
| MAF | v-l-maf avian musculoaponeurotic | CCA4, c-MAF | √ |
| MAFB | v-l-maf avian musculoaponeurotic | KRML, MCTO | √ |
| MAFK | v-l-maf avian musculoaponeurotic | NFE2U, P18 | |
| MAGEA1 | Melanoma antigen family A, 1 (affects expression of antigen M72 F) | CT1.1, MAGE1 | |
| MAGEA11 | Melanoma antigen family A, 11 | CT1.11, MAGE-11, MAGE11, MAGEA-11 | |

| | | | |
|----------|---|---|---|
| MAGEA4 | Melanoma antigen family A, 4 | CT1.4, MAGE-41, MAGE-X2, MAGE4, MAGE4A, MAGE4B | |
| MAGEA5 | Melanoma antigen family A, 5 | CT1.5, MAGE5, MAGEA4 | |
| MAGEB1 | Melanoma antigen family B, 1 | CT3.1, DAM10, MAGE-Xp, MAGEL1 | |
| MAGEB10 | Melanoma antigen family B, 10 | | |
| MAGEB2 | Melanoma antigen family B, 2 | CT3.2, DAM6, MAGE-XP-2 | |
| MAGEB3 | Melanoma antigen family B, 3 | CT3.5 | |
| MAGEB4 | Melanoma antigen family B, 4 | CT3.6 | |
| MAG11 | membrane associated guanylate kinase, w w and PDZ domain containing 2 | RP11-881H2.2, AIP-3, AIP3, DAIAP1, DAI-1, DAI1, MAG11, Mag11, TNRC10, WWP2 | |
| MAG12 | membrane associated guanylate kinase, w w and PDZ domain containing 2 | ACVRIP1, AIP-1, AIP1, ARIP1, MAGI-2, SSCAM | |
| MAG13 | membrane associated guanylate kinase, w w and PDZ domain containing 2 | | |
| MAGOHB | Mago-nashi homolog B (Drosophila) | MGN2, mago, magoh | |
| MAGT1 | Magnesium transporter 1 | RP11-217H1.1, IAT, MKX93, OST3B, PRO0730, XMEN_4217H1.1 | |
| MAL2 | mal, T-cell differentiation protein 2 | | |
| MALAT1 | metastasis associated lung adenocarcinoma transcript 1 | PRO1073, HCN, LINC00047, MALAT-1, NCRNA00047, NEAT2, PR02853, rna:RNA | √ |
| MALT1 | lymphoma translocation gene 1 | IMD12, MLT, MLT1 | √ |
| MAMDC2 | MAM domain containing 2 | RP11-373A9.2 | |
| MAML1 | Mastermind-like 1 (Drosophila) | Mam-1, Mam1 | |
| MAN1A1 | Mannosidase, alpha, class 1A, member 1 | HUMM3, HUMM9, MAN9 | |
| MAN2A2 | Mannosidase, alpha, class 2A, member 2 | MANA2X | |
| MANBA | Mannosidase, beta A, lysosomal | MANB1 | |
| MANEA | Mannosidase, endo-alpha | ENDO, hEndo | |
| MAOA | Monoamine oxidase A | RP1-201D17__B.2, MAO-A | |
| MAP1A | Microtubule-associated protein 1A | MAP1L, MTAP1A | |
| MAP1B | Microtubule-associated protein 1B | FUTSCH, MAP5, PPP1R102 | |
| MAP1LC3B | microtubule-associated protein 1 light chain 3 beta | ATG8F, LC3B, MAP1A/1BLC3-a, MAP1LC3B | |
| MAP2 | Microtubule-associated protein 2 | MAP2AB, MAP2C, MAP2 | |
| MAP2K1 | Mitogen-activated protein kinase kinase 1 | CFC3, MAPKK1, MEK1, MKK1, PRKMK1 | √ |
| MAP2K4 | Mitogen-activated protein kinase kinase 4 | JNKK, JNKK1, MAPKK4, MEK4, MKK4, PRKMK4, MAPKK6, MEK6, MKK6, PRKMK6, SAKK3, SAKK2 | √ |
| MAP2K6 | Mitogen-activated protein kinase kinase 6 | MAPKK6, MEK6, MKK6, PRKMK6, SAKK3, SAKK2 | |
| MAP3K10 | mitogen-activated protein kinase kinase kinase 10 | MEKK10, MLK2, MST | |
| MAP3K15 | mitogen-activated protein kinase kinase kinase 15 | RP11-723P2.3, ASK3, bA723P2.3 | |
| MAP3K3 | mitogen-activated protein kinase kinase kinase 3 | MAPKKK3, MEKK3 | |
| MAP3K4 | mitogen-activated protein kinase kinase kinase 4 | IKK3-4/5/10.4, MAPKKK4, MEKK4, MEKK4, MTK1, PR0413 | |

| | | | |
|-----------|---|--|--|
| MAP3K8 | mitogen-activated protein kinase kinase kinase | RP11-449H17.8, COT, EST, ESTT, MEKK8, TPL2, Tpl-2, COT | |
| MAP3K9 | mitogen-activated protein kinase kinase kinase | MEKK9, MLK1, PRKE1 | |
| MAP4K3 | mitogen-activated protein kinase kinase kinase | GLK, MAPKKK3, MEKKK 3, MEKKK3, RAB8IPL1 | |
| MAP4K4 | mitogen-activated protein kinase kinase kinase | FLH21957, HEL-S-31, HGK, MEKKK4, NIK | |
| MAP4K5 | mitogen-activated protein kinase kinase kinase | GCKR, KHS, KHS1, MAPKKKK5 | |
| MAP6 | Microtubule-associated protein 6 | MTAP6, N-STOP, STOP | |
| MAP6D1 | MAP6 domain containing 1 | MAPO6D1, SL21 | |
| MAP7 | Microtubule-associated protein 7 | E-MAP-115, EMAP115 | |
| MAP7D2 | MAP7 domain containing 2 | RP11-393H10.2 | |
| MAP9 | Microtubule-associated protein 9 | ASAP | |
| MAPK1 | Mitogen-activated protein kinase 1 | ERK, ERK-2, ERK2, ERK1, MAPK2, P42MAPK, RP13-51-EB23.1, JNK3, JNK3A1, PRKM10, SAPK10, P38B, P38DELTA2, PRKM11, SAPK2, SAPK2B, p38-2, p38beta | |
| MAPK10 | Mitogen-activated protein kinase 10 | RP13-51-EB23.1, JNK3, JNK3A1, PRKM10, SAPK10, P38B, P38DELTA2, PRKM11, SAPK2, SAPK2B, p38-2, p38beta | |
| MAPK11 | Mitogen-activated protein kinase 11 | ERK3, ERK6, P38GAMMA, PRKM12, SAPK-3, SAPK3 | |
| MAPK12 | Mitogen-activated protein kinase 12 | ERK3, ERK6, P38GAMMA, PRKM12, SAPK-3, SAPK3 | |
| MAPK14 | Mitogen-activated protein kinase 14 | RP11-179N10.5, CSDF, CSDF1, CSDF2, CSDF1, EAP, M-3, PRKM14, PRKM15, PRK SAPK2A, p38 | |
| MAPK1IP1L | mitogen-activated protein kinase 1 interacting protein 1 like | C14orf32, MISS, c14_5346 | |
| MAPK4 | Mitogen-activated protein kinase 4 | ERK-4, ERK4, PRKM4, p63-MAPK, p63MAPK | |
| MAPK8IP3 | mitogen-activated protein kinase 8 interacting protein 3 | AC012180.8, JIP3, JSAP1, SYD2, syd | |
| MAPK9 | Mitogen-activated protein kinase 9 | JNK-33, JNK2, JNK2A, JNK2ALPHA, JNK2B, JNK2BETA, PRKM9, SAPK, SAPK1, p54, p54, SAPK | |
| MAPKAP1 | mitogen-activated protein kinase associated protein 1 | RP11-269P11.1, JC310, MIP1, SIN1, SIN1b, SIN1g | |
| MAPKAPK3 | mitogen-activated protein kinase-activated protein kinase 3 | 3PK, MAPKAP-K3, MAPKAP3, MAPKAPK-3, MK-3 | |
| MAPKBP1 | mitogen-activated protein kinase binding protein 1 | JNKBP-1 | |
| MAPRE1 | microtubule-associated protein, RFLD family member 1 | EB1 | |
| MAPT | Microtubule-associated protein tau | DDIAC, FTDI-17L, MSTD, MTBT1, MTBT2, FTND, PPP1R102, TAIL-MAPT | |
| MARCH1 | Membrane-associated ring finger (C3HC4) domain containing 1 | MARCH-I, RNF171 | |
| MARCH3 | Membrane-associated ring finger (C3HC4) domain containing 3 | MARCH-III, RNF173 | |
| MARCH5 | Membrane-associated ring finger (C3HC4) domain containing 5 | RP11-543N17.3, MARCH-V, MITOL, RNF153 | |
| MARCH6 | Membrane-associated ring finger (C3HC4) domain containing 6 | DOA10, MARCH-VI, RNF176, TEB4 | |
| MARCKS | Microtubule affinity-regulating protein kinase C substrate 1 | 80K-L, MACS, PKCSL, PRKCSL | |
| MARK1 | Microtubule affinity-regulating kinase 1 | MARK, Par-1c, Par1c | |
| MARK2 | Microtubule affinity-regulating kinase 2 | EMK-1, EMK1, PAR-1, Par-1b, Par1b | |
| MARS | Methionyl-tRNA synthetase | METRS, MRS, MTRNS, SPG70 | |
| MARVELD1 | MARVEL domain containing 1 | RP11-546K25.8, CDT4, MARVD1, MKVELD1, LA548K22.8 | |

| | | | |
|--------|---|--|--|
| MASP1 | Mannan-binding lectin serine peptidase 1 (G1C/G2) | MSM1, CRAMP, CRAMP1, MAP1, MASP, MASP3, MASP4, PRSS5, P-DE | |
| MAST4 | Glycocalyx-associated serine/threonine kinase family member 4 | | |
| MAT2A | Methionine adenosyltransferase II, alpha | MATA2, MATII, SAMS2 | |
| MATN2 | Matrilin 2 | UNQ193/PRO219 | |
| MATN3 | Matrilin 3 | DIPOA, EDM5, HOA, OADIP, OS2 | |
| MATR3 | Matrin 3 | ALS21, MPD2, VCPDM | |
| MAVS | Mitochondrial antiviral signaling protein | CARDIF, IPS-1, IPS1, VISA | |
| MB | Myoglobin | RP4-569D19.7, PVALB, myoglobin | |
| MBD1 | Methyl-CpG binding domain protein 1 | CXXC3, PCM1, RFT | |
| MBD2 | Methyl-CpG binding domain protein 2 | DMTase, NY-CO-41 | |
| MBD4 | Methyl-CpG binding domain protein 4 | MED1 | |
| MBD5 | Methyl-CpG binding domain protein 5 | MRD1 | |
| MBIP | MAP3K12 binding inhibitory protein 1 | BM-015 | |
| MBLAC2 | Metallo-beta-lactamase domain containing 2 | | |
| MBNL1 | Muscleblind-like splicing regulator 1 | EXP, EXP35, EXP40, EXP42, MBNL | |
| MBNL2 | Muscleblind-like splicing regulator 2 | RP11-128N14.1, MBLL, MBLL39, PRO2032 | |
| MBNL3 | Muscleblind-like splicing regulator 3 | RP5-842K24.3, CHCR, MBLX, MBLX39, MBXL | |
| MBOAT1 | membrane bound O-acyltransferase domain containing 1 | RP1-150G2.2, 1, LPEAT1, LPEAT, LPEAT1, LPSAT, OACT1, H424Q11.1 | |
| MBOAT2 | membrane bound O-acyltransferase domain containing 2 | LPCAT4, OACT2 | |
| MBP | Myelin basic protein | | |
| MBTD1 | Mbt domain containing 1 | SA49P01 | |
| MBTPS2 | membrane-bound transcription factor 2 | BRESEK, IFAP, KFSD, KFSDX, OLMSX, S2P | |
| MC2R | melanocortin 2 receptor (adrenocorticotropic hormone) | ACTHR | |
| MCART6 | | | |
| MCC | Mutated in colorectal cancers | MCC1 | |
| MCCC2 | Methylcrotonoyl-CoA carboxylase 2 (beta) | MCCB | |
| MCFD2 | Multiple coagulation factor deficiency 2 | F5F8D, F5F8D2, LMAN1IP, SDNSF | |
| MCL1 | Myeloid cell leukemia 1 | BCL2L5, EAT-ES, MCL1E, MCL1S, MCL-1, TM, UC12-L-2, H1/EAT-MCL1 | |
| MCM10 | minichromosome maintenance complex component 10 | PRO2249, CNA43, DNA43 | |
| MCM3 | minichromosome maintenance complex component 3 | RP1-108C2.3, HCC5, P1-MCM3, P1.h, RLFB | |
| MCM6 | minichromosome maintenance complex component 6 | MCG40308, Mis5, P105MCM | |
| MCM9 | minichromosome maintenance complex component 9 | RP5-529L24.2, C00H01, MCMDC1, W529L24.1, H220L24.2 | |
| MCOLN3 | Mucolipin 3 | TRP-ML3, TRPML3 | |

| | | | |
|--------|---|--|---|
| MCPH1 | Microcephalin 1 | BRIT1, MCT | |
| MCTP2 | Multiple C2 domains, transmembrane 2 | RP11-4F5.2 | |
| MCTS1 | Malignant T cell amplified sequence 1 | MCT-1, MCT1 | |
| MDFIC | MyoD family inhibitor domain containing | HIC | |
| MDGA1 | MAM domain containing | RP3-402N21.1, GPIM, MAMDC3 | |
| MDGA2 | MAM domain containing | UNQ8188/PRO23197, MAMDC1, c14_5286 | |
| MDH1B | Malate dehydrogenase 1B, NAD (soluble) | RP11-95H11 | |
| MDM1 | Mdm1 nuclear protein homolog (mouse) | | |
| MDM2 | MDM2 proto-oncogene, E3 ubiquitin protein | ACTFS, HDMX, hdm2 | √ |
| MDM4 | MDM4, p53 regulator | RP11-430C7.1, HDMX, MDMX, MRP1 | √ |
| MDP1 | Magnesium-dependent phosphatase 1 | FN6PASE, MDP-1 | |
| MDS2 | Myelodysplastic syndrome 2 translocation | RP11-223J15.1 | √ |
| ME1 | Malic enzyme 1, NADP(+)-dependent, | HUMNDME, MES | |
| ME2 | Malic enzyme 2, NADP(+)-dependent, | ODS1 | |
| MEA1 | Male-enhanced antigen 1 | HYS, MEA | |
| MEAF6 | MYST/Esal-associated factor 6 | RP3-423B22.2, C1orf149, CENP-28, EAF6, NY-SAR-91 | |
| MECOM | MDS1 and EVI1 complex locus | RC3_1040438, AMELT-EVI1, EVI1, MDS1, MDS1- | |
| MECP2 | Methyl CpG binding protein 2 | EVI1, RBDM2, | |
| MED1 | Mediator complex subunit 1 | RS, RTS, RTT, | |
| MED10 | Mediator complex subunit 10 | CRSP1, CRSP200, DNIF205, DNIF230, FBI, FTAKDI, | |
| MED13 | Mediator complex subunit 13 | DRACDB, DR18A, TRAP220, TRIP2 | |
| MED13L | Mediator complex subunit 13-like | L6, NUT2, TRG20 | |
| MED14 | Mediator complex subunit 14 | ARC250, DRIP250, HSPC221, THRAP1, TRAP240 | |
| MED17 | Mediator complex subunit 17 | PROSIT240, THRAP2, TRAP240L | |
| MED20 | Mediator complex subunit 20 | CRSP130, CRSP12, CSKP, CA014, DNIF150, EXLMT, | |
| MED22 | Mediator complex subunit 22 | RCB1, TRAP170 | |
| MED26 | Mediator complex subunit 26 | CRSP6, CRSP77, DRIP80, TRAP80 | |
| MED28 | Mediator complex subunit 28 | RP5-973N23.1, PRO0213, TRFP | |
| MED6 | Mediator complex subunit 6 | RP11-244N20.9, MED24, SURF5, surf-5 | |
| MED8 | Mediator complex subunit 8 | CRSP7, CRSP70 | |
| MED9 | Mediator complex subunit 9 | FKSG20, 1500003D12Rik, EG1, magicin | |
| MEF2A | Myocyte enhancer factor 2A | ARC33, NY-REN-28 | |
| MEF2C | Myocyte enhancer factor 2C | RP1-92O14.5, ARC32 | |
| | | MED25 | |
| | | ADCAD1, RSRFC4, RSRFC9, mef2 | |
| | | C5DELq14.3, DEL5q14.3 | |

| | | | |
|---------|--|---|---|
| MEG3 | Maternally expressed 3 (non-protein coding) | FP304, GTE2, LINC00023, NCKNA00023, PRO0518, PR02160, rnhb1 | |
| MEGF10 | Multiple EGF-like-domains 10 | EMARDD | |
| MEGF11 | Multiple EGF-like-domains 11 | UNQ1949 | |
| MEGF9 | Multiple EGF-like-domains 9 | UNQ671/PRO1305, EGFL5 | |
| MEI1 | Meiosis inhibitor 1 | RP5-821D11.2, SPATA38 | |
| MEIS2 | Meis homeobox 2 | HsT18361, MRG1 | |
| MEIS3P1 | Meis homeobox 3 pseudogene 1 | MEIS3, MEIS4, MRG2 | |
| MELK | Maternal embryonic leucine zipper kinase | maternal embryonic leucine zipper kinase | |
| MEP1A | Meprin A, alpha (PABA peptide hydrolase) | PPHA | |
| MEPE | Matrix extracellular phosphoglycoprotein | OF45 | |
| MERTK | MER proto-oncogene, tyrosine kinase | MER, RP38, c-mer | |
| MESDC2 | Mesoderm development candidate 2 | UNQ1911/PRO4369, BOCA, MESD | |
| MEST | Mesoderm specific transcript | PEG1 | |
| MET | MET proto-oncogene, receptor tyrosine kinase | AUTS9, HGFR, RCCP2, c-Met | √ |
| METAP1 | Methionyl aminopeptidase 1 | MAP1A, MetAP1A | |
| METAP2 | Methionyl aminopeptidase 2 | MAP2, MNPEP, p67, p67eIF2 | |
| METT5D1 | | | |
| METTL1 | Methyltransferase like 1 | C12orf1, TRM8, TRMT8, YDL201w | |
| METTL10 | Methyltransferase like 10 | C10orf138, Em:AC068896.3 | |
| METTL12 | Methyltransferase like 12 | U99HG | |
| METTL13 | Methyltransferase like 13 | CGI-01, 5630401D24Rik, KIAA0859, feat | |
| METTL14 | Methyltransferase like 14 | | |
| METTL2A | Methyltransferase like 2A | HSPC266, METTL2 | |
| METTL8 | Methyltransferase like 8 | TIP | |
| METTL9 | Methyltransferase like 9 | CGI-81, DREV, DREV1, PAP1 | |
| MEX3A | Mex-3 RNA binding family member A | MEX-3A, RKHD4 | |
| MEX3B | Mex-3 RNA binding family member B | MEX-3B, RKHD3, RNF195 | |
| MEX3C | Mex-3 RNA binding family member C | BM-013, MEX-3C, RKHD2, RNF194 | |
| MFAP3 | Microfibrillar-associated protein 3 | | |
| MFAP3L | Microfibrillar-associated protein 3-like | HSD39, NYD-sp9 | |
| MFN1 | Mitofusin 1 | hfzo1, hfzo2 | |
| MFSD1 | major facilitator superfamily domain containing 1 | UG0581B09, SMAP4 | |
| MFSD11 | major facilitator superfamily domain containing 11 | ET | |

| | | | |
|----------|--|--|--|
| MFSD4 | major facilitator superfamily domain | UNQ3064/PRO9894, UNQ3064 | |
| MFSD6 | major facilitator superfamily domain | MMR2, hMMR2 | |
| MFSD8 | major facilitator superfamily domain | CLN7 | |
| MGA | MGA, MAX dimerization protein | MAD5, MXD5 | |
| MGAT2 | mannosyl (alpha-1,6)-glycoprotein beta-1,2- | CDG2A, CDGS2, GLCNACTII, GNT-II, GNT2 | |
| MGAT3 | Mannosyl (beta-1,4)-glycoprotein beta-1,4- | RP5-1104E15.2, GNT-III, GNT3 | |
| MGAT4A | Mannosyl (alpha-1,3)-glycoprotein beta-1,4- | GNT-IV, GNT-IVA, GnT-4a | |
| MGAT5B | M ^T B7898annosyl (alpha-1,6)-glycoprotein | GnT-IX, GnT-VB | |
| MGC11082 | | | |
| MGC13053 | | | |
| MGC20647 | Uncharacterized protein MGC20647 | | |
| MGC21881 | | | |
| MGC23284 | | | |
| MGC2752 | | | |
| MGC2889 | Uncharacterized protein MGC2889 | | |
| MGC34034 | | | |
| MGC42157 | | | |
| MGEA5 | meningioma expressed antigen 5 | MEA5, NCOAT, OGA | |
| MGLL | Monoglyceride lipase | HU-K5, HUK5, MAGL, MGL | |
| MGRN1 | mannosyl ring finger 1, E3 ubiquitin | RNF156 | |
| MIA2 | Melanoma inhibitory activity 2 | | |
| MIA3 | melanoma inhibitory activity family, | RP11-576J16.4, ARNT, D520, TANGO, TANGO1, | |
| MIAT | myocardial infarction associated transcript | U220137, GOMAFU, LINC00000, NCRNA00000, | |
| MIB1 | Mindbomb E3 ubiquitin protein ligase 1 | DIP-1, DIP1, LVNC7, MIB, ZZANK2, ZZZ6 | |
| MICAL2 | microtubule associated monooxygenase, | MICAL-2PV1, MICAL2PV2, MICAL2 | |
| MICAL3 | microtubule associated monooxygenase, | hCG_21531, MICAL-3 | |
| MID2 | Midline 2 | RP6-191P20.2, FXY2, MRX101, RNF60, TRIM1 | |
| MIER1 | mesoderm induction early response 1, | RP5-944N15.1, ER1, MI-ER1 | |
| MIER3 | mesoderm induction early response 1, family | | |
| MINA | MYC induced nuclear antigen | MDIG53, NO52, ROX, MINA | |
| MINK1 | Misshapen-like kinase 1 | B55, MAP4K6, MINK, YSK2, ZC3, hMINK, hMINKbeta | |
| MINPP1 | multiple inositol-polyphosphate phosphatase | RP11-57C13.1, HIPER1, MINPP2, MIPP | |
| MIP | Major intrinsic protein of lens fiber | AQP0, CTRCT15, LIM126, MP26, MIP | |

| | | | |
|---------|--|--|---|
| MIPOL1 | Mirror-image polydactyly 1 | | |
| MIR17HG | MIR-17-92 cluster host gene (non-protein coding) | RP11-121J7.2, C13orf25, FGLDS2, LINC00046, MIR101, MIR101, MIR101, NCRNA00048, MIR-17-92 | |
| MIR34A | MicroRNA 34a | MIRN34A, miRNA34A, mir-34 | |
| MITD1 | MIT1, microtubule interacting and transport, microtubule-associated transcription factor | | |
| MITF | | CMM8, MI, WS2, WS2A, bHLHe32 | √ |
| MKI67 | Marker of proliferation Ki-67 | RP11-380J17.2, KIA, MIB-, MIB-1, PPP1R105 | |
| MKL1 | Megakaryoblastic leukemia (translocation) 1 | RP5-1042K10.11-009, BSAC, MAL, MRTF-A | √ |
| MKLN1 | Muskm1, intracellular mediator containing | TWA2 | |
| MKNK1 | MAP kinase interacting serine/threonine kinase 1 | RP11-49P4.3, MNK1 | |
| MKNK2 | MAP kinase interacting serine/threonine kinase 2 | GPRK7, MNK2 | |
| MKRN1 | Makorin ring finger protein 1 | RNF61 | |
| MKRN3 | Makorin ring finger protein 3 | CPPB2, D15S9, RNF63, ZFP127, ZNF127 | |
| MKX | Makorin ring finger protein 3 | CPPB2, D15S9, RNF63, ZFP127, ZNF127 | |
| MLANA | Melan-A | RP11-546N22.1, MART-1, MART1 | |
| MLEC | Malectin | KIAA0152 | |
| MLF1 | Myeloid leukemia factor 1 | | √ |
| MLH1 | MutL homolog 1 | COCA2, FCC2, HNPCC, HNPCC2, hMLH1 | √ |
| MLKL | Mixed lineage kinase domain-like | hMLKL | |
| MLL | | | √ |
| MLL2 | | | |
| MLL3 | | | √ |
| MLL5 | | | |
| MLLT10 | myeloid/lymphoid or mixed-lineage leukemia (with heteromeric core-binding) | RP11-399C16.2, AF10 | √ |
| MLLT3 | myeloid/lymphoid or mixed-lineage leukemia (with heteromeric core-binding) | AF9, YEATS3 | √ |
| MLLT4 | myeloid/lymphoid or mixed-lineage leukemia (with heteromeric core-binding) | AF6 | √ |
| MLLT6 | myeloid/lymphoid or mixed-lineage leukemia (with heteromeric core-binding) | AF17 | √ |
| MLXIP | MLX interacting protein | MIR, MONDOA, bHLHe36 | |
| MMAA | methylmalonic aciduria (cobalamin deficiency) cblA type with homocystinuria | cblA | |
| MMACHC | methylmalonic aciduria (cobalamin deficiency) cblC type with homocystinuria | RP11-291L19.3, cblC | |
| MME | Membrane metallo-endopeptidase | CALLA, CD10, NEP, SFE | |
| MMGT1 | Membrane magnesium transporter 1 | RP11-274K13.3, EMC5, TMEM32 | |
| MMP1 | matrix metalloproteinase 1 (interstitial collagenase) | CLG, CLGN | |
| MMP10 | Matrix metalloproteinase 10 (stromelysin 2) | SL-2, STMY2 | |

| | | | |
|---------|--|---|---|
| MMP13 | Matrix metalloproteinase 13 (collagenase 3) | CLG3, MANDP1, MMP-13 | |
| MMP14 | Matrix metalloproteinase 14 (membrane-type-1) | MMP14, MMP14L1, MMP14L2, MMP14L3, MMP14L4, MMP14L5, MMP14L6, MMP14L7, MMP14L8, MMP14L9, MMP14L10, MMP14L11, MMP14L12, MMP14L13, MMP14L14, MMP14L15, MMP14L16, MMP14L17, MMP14L18, MMP14L19, MMP14L20, MMP14L21, MMP14L22, MMP14L23, MMP14L24, MMP14L25, MMP14L26, MMP14L27, MMP14L28, MMP14L29, MMP14L30, MMP14L31, MMP14L32, MMP14L33, MMP14L34, MMP14L35, MMP14L36, MMP14L37, MMP14L38, MMP14L39, MMP14L40, MMP14L41, MMP14L42, MMP14L43, MMP14L44, MMP14L45, MMP14L46, MMP14L47, MMP14L48, MMP14L49, MMP14L50, MMP14L51, MMP14L52, MMP14L53, MMP14L54, MMP14L55, MMP14L56, MMP14L57, MMP14L58, MMP14L59, MMP14L60, MMP14L61, MMP14L62, MMP14L63, MMP14L64, MMP14L65, MMP14L66, MMP14L67, MMP14L68, MMP14L69, MMP14L70, MMP14L71, MMP14L72, MMP14L73, MMP14L74, MMP14L75, MMP14L76, MMP14L77, MMP14L78, MMP14L79, MMP14L80, MMP14L81, MMP14L82, MMP14L83, MMP14L84, MMP14L85, MMP14L86, MMP14L87, MMP14L88, MMP14L89, MMP14L90, MMP14L91, MMP14L92, MMP14L93, MMP14L94, MMP14L95, MMP14L96, MMP14L97, MMP14L98, MMP14L99, MMP14L100 | |
| MMP20 | Matrix metalloproteinase 20 | AI2A2, MMP-20 | |
| MMP25 | Matrix metalloproteinase 25 | MMP25, MMP25L1, MMP25L2, MMP25L3, MMP25L4, MMP25L5, MMP25L6, MMP25L7, MMP25L8, MMP25L9, MMP25L10, MMP25L11, MMP25L12, MMP25L13, MMP25L14, MMP25L15, MMP25L16, MMP25L17, MMP25L18, MMP25L19, MMP25L20, MMP25L21, MMP25L22, MMP25L23, MMP25L24, MMP25L25, MMP25L26, MMP25L27, MMP25L28, MMP25L29, MMP25L30, MMP25L31, MMP25L32, MMP25L33, MMP25L34, MMP25L35, MMP25L36, MMP25L37, MMP25L38, MMP25L39, MMP25L40, MMP25L41, MMP25L42, MMP25L43, MMP25L44, MMP25L45, MMP25L46, MMP25L47, MMP25L48, MMP25L49, MMP25L50, MMP25L51, MMP25L52, MMP25L53, MMP25L54, MMP25L55, MMP25L56, MMP25L57, MMP25L58, MMP25L59, MMP25L60, MMP25L61, MMP25L62, MMP25L63, MMP25L64, MMP25L65, MMP25L66, MMP25L67, MMP25L68, MMP25L69, MMP25L70, MMP25L71, MMP25L72, MMP25L73, MMP25L74, MMP25L75, MMP25L76, MMP25L77, MMP25L78, MMP25L79, MMP25L80, MMP25L81, MMP25L82, MMP25L83, MMP25L84, MMP25L85, MMP25L86, MMP25L87, MMP25L88, MMP25L89, MMP25L90, MMP25L91, MMP25L92, MMP25L93, MMP25L94, MMP25L95, MMP25L96, MMP25L97, MMP25L98, MMP25L99, MMP25L100 | |
| MMP7 | Matrix metalloproteinase 7 (matrilysin) | MMP-7, MPSL1, PUMP-1 | |
| MMP8 | Matrix metalloproteinase 8 (neutrophin collagenase) | CLG1, HNC, MMP-8, PMNL-CL | |
| MMRN2 | Multimerin 2 | EMILIN-3, EMILIN3, ENDOGLYX-1 | |
| MN1 | Meningioma (disrupted in balanced translocation) 1 | C1A437G10.1, MGC6, MGC6L1, MGC6L2, MGC6L3, MGC6L4, MGC6L5, MGC6L6, MGC6L7, MGC6L8, MGC6L9, MGC6L10, MGC6L11, MGC6L12, MGC6L13, MGC6L14, MGC6L15, MGC6L16, MGC6L17, MGC6L18, MGC6L19, MGC6L20, MGC6L21, MGC6L22, MGC6L23, MGC6L24, MGC6L25, MGC6L26, MGC6L27, MGC6L28, MGC6L29, MGC6L30, MGC6L31, MGC6L32, MGC6L33, MGC6L34, MGC6L35, MGC6L36, MGC6L37, MGC6L38, MGC6L39, MGC6L40, MGC6L41, MGC6L42, MGC6L43, MGC6L44, MGC6L45, MGC6L46, MGC6L47, MGC6L48, MGC6L49, MGC6L50, MGC6L51, MGC6L52, MGC6L53, MGC6L54, MGC6L55, MGC6L56, MGC6L57, MGC6L58, MGC6L59, MGC6L60, MGC6L61, MGC6L62, MGC6L63, MGC6L64, MGC6L65, MGC6L66, MGC6L67, MGC6L68, MGC6L69, MGC6L70, MGC6L71, MGC6L72, MGC6L73, MGC6L74, MGC6L75, MGC6L76, MGC6L77, MGC6L78, MGC6L79, MGC6L80, MGC6L81, MGC6L82, MGC6L83, MGC6L84, MGC6L85, MGC6L86, MGC6L87, MGC6L88, MGC6L89, MGC6L90, MGC6L91, MGC6L92, MGC6L93, MGC6L94, MGC6L95, MGC6L96, MGC6L97, MGC6L98, MGC6L99, MGC6L100 | v |
| MNT | MAX network transcriptional repressor | MAD6, MXD6, ROX, bHLHd3 | |
| MNX1 | Motor neuron and pancreas homeobox 1 | HB9, HLXB9, HOXHB9, SCRA1 | |
| MOBKL1A | | | |
| MOBKL2B | | | |
| MOBKL2C | | | |
| MOBKL3 | | | |
| MOBP | Myelin-associated oligodendrocyte basic protein | | |
| MOCS2 | Molybdenum cofactor synthesis 2 | MCBPE, MOCO1, MOCODB, MPTS | |
| MOG | Myelin oligodendrocyte glycoprotein | DAQB-92E24.2, BTN6, BTNL11IG2, NRCLP7, MOG | |
| MOGS | Mannosyl-oligosaccharide glucosidase | CDG2B, CWH41, DER7, GCS1 | |
| MON1A | MON1 secretory trafficking family member A | SAND1 | |
| MON1B | MON1 secretory trafficking family member B | HSRG1, SAND2, SRG1 | |
| MON2 | MON2 homolog (<i>S. cerevisiae</i>) | | |
| MORC3 | MORC family CW-type zinc finger 3 | NXP2, ZCW5, ZCWCC3 | |
| MORC4 | MORC family CW-type zinc finger 4 | RP1-75H8.4, ZCW4, ZCWCC2, dJ75H8.2 | |
| MORN4 | MORN repeat containing 4 | RP11-548K23.4, C10orf83, bA548K23.4 | |
| MOSC1 | | | |
| MOSC2 | | | |
| MOSPD1 | Motile sperm domain containing 1 | RP3-473B4.2, DJ473B4 | |
| MOSPD2 | Motile sperm domain containing 2 | | |
| MPL | MPL proto-oncogene, thrombopoietin receptor | RP1-92O14.1, C-MPL, CD110V, THCYT2, TPOR, MPL | v |
| MPP2 | Membrane protein, palmitoylated 2 (MAGLUK family member 2) | DLG2 | |
| MPP3 | Membrane protein, palmitoylated 3 (MAGLUK family member 3) | DLG3 | |
| MPP4 | Membrane protein, palmitoylated 4 (MAGLUK family member 4) | ALS2CR5, DLG6 | |
| MPP5 | Membrane protein, palmitoylated 5 (MAGLUK family member 5) | PALS1 | |

| | | | |
|---------|---|--|---|
| MRPS16 | Mitochondrial ribosomal protein S16 | CGI-132, COXPD2, MRP-S16, RPMS16 | |
| MRPS18B | Mitochondrial ribosomal protein S18B | DADD-129D20.0, COG114, HSPC183, HumanS18a, MRP-S18.2, MRPS18.2, PTD017, S18mt | |
| MRPS23 | Mitochondrial ribosomal protein S23 | CGI-138, HSPC329, MRP-S23 | |
| MRPS25 | Mitochondrial ribosomal protein S25 | MRP-S25, RPMS25 | |
| MRPS27 | Mitochondrial ribosomal protein S27 | MRP-S27, S27mt | |
| MRPS28 | Mitochondrial ribosomal protein S28 | HSPC007, MRP-S28, MRP-S35, MRPS35 | |
| MRPS33 | Mitochondrial ribosomal protein S33 | CGI-139, MRP-S33, PTD003, S33mt | |
| MRPS35 | Mitochondrial ribosomal protein S5 | HDCMD11P, MDS023, MRP-S28, MRPS28 | |
| MRPS6 | Mitochondrial ribosomal protein S6 | C21orf101, MRP-S6, RPMS6, S6mt | |
| MRPS9 | Mitochondrial ribosomal protein S9 | MRP-S9, RPMS9, S9mt | |
| MRRF | Mitochondrial ribosome recycling factor | MRFF, MTRRF, RRF | |
| MRS2 | MRS2 magnesium transporter | HPTL, MRS2 | |
| MRV11 | Murine retrovirus integration site 1 homolog | IRAG, JAW1L | |
| MS4A1 | Membrane-spanning 4-domains, subfamily 1 member 1 | B1, Bp35, CD20, CVID5, LEU-16, MS4A2, S7 | |
| MS4A14 | Membrane-spanning 4-domains, subfamily 14 member 14 | MS4A16, NYD-SP21 | |
| MS4A3 | Membrane-spanning 4-domains, subfamily 3 member 3 | CD20L, HTM4 | |
| MS4A6A | Membrane-spanning 4-domains, subfamily 6 member 6A | CD401, 4SPAN3, 4SPAN3.2, CD20L3, MS4A6, MST000, MST000 | |
| MS4A7 | Membrane-spanning 4-domains, subfamily 4 member 7 | 4SPAN2, CD20L4, CFFM4, MS4A8 | |
| MSH2 | MutS homolog 2 | COCA1, FCC1, HNPCC, HNPCC1, LCFS2 | √ |
| MSI1 | Musashi RNA-binding protein 1 | | |
| MSI2 | Musashi RNA-binding protein 2 | MSI2H | √ |
| MSL2 | Musashi RNA-binding protein 2 | MSI2H | |
| MSL3 | Male-specific lethal 3 homolog (Drosophila) | MSL3L1 | |
| MSR1 | Macrophage scavenger receptor 1 | CD204, SCARA1, SR-A, SRA, phSR1, phSR2 | |
| MSRB3 | Methionine sulfoxide reductase B3 | UNQ1965/PRO4487, DFNB74 | |
| MST1P2 | Macrophage stimulating 1 (hepatocyte growth factor-like) pseudogene 2 | | |
| MSTN | Myostatin | GDF8, MSLHP | |
| MSTO2P | Misato family member 2, pseudogene | MSTO2 | |
| MT1IP | Metallothionein 1I, pseudogene | MT1, MT1I, MTE | |
| MT1X | Metallothionein 1X | MT-1I, MT1 | |
| MT2A | Metallothionein 2A | MT2 | |
| MTA1 | Metastasis associated 1 | | |
| MTAP | Methylthioadenosine phosphorylase | DDMT, DMST11, DMSTM11, HEL-247, LUMBT, MSA1, 866 | |

| | | | |
|---------|---|--|--|
| MTBP | MDM2 binding protein | MTBP @ LOVD, MDM2BP | |
| MTCH1 | Mitochondrial carrier 1 | RP1-90K10.1, CGI-64, PIG60, PSAP, SLC25A49 | |
| MTCH2 | Mitochondrial carrier 2 | HSPC032, MIMP, SLC25A50 | |
| MTCP1NB | | | |
| MTDH | Metadherin | 3D3, AEG-1, AEG1, LYRIC, LYRIC/3D3 | |
| MTF1 | Metal-regulatory transcription factor 1 | MTF-1, ZRF | |
| MTF2 | Metal response element binding transcription factor 2 | RP5-976O13.1, M96, PCL2, TDRD19A, dJ976O13.2 | |
| MTFR1 | Mitochondrial fission regulator 1 | CHPPR, FAM54A2 | |
| MTHFD1L | Methylenetetrahydrofolate dehydrogenase (NADPH-dependent) like 1 | RP1-292B18.2, FTHFSDC1, MTC1THFS, dJ292B18.2 | |
| MTHFD2L | Methylenetetrahydrofolate dehydrogenase (NADPH-dependent) like 2 | | |
| MTHFR | Methylenetetrahydrofolate reductase (NADPH) | RP11-56N19.4 | |
| MTHFS | 5,10-methylenetetrahydrofolate synthetase (5-factor) non-heme-like 5, testis-specific (human) | HsT19268 | |
| MTL5 | | CXCDC2, MTLT, TESMIN | |
| MTM1 | Myotubularin 1 | CNM, MTMX, XLMTM | |
| MTMR1 | Myotubularin related protein 1 | | |
| MTMR10 | Myotubularin related protein 10 | | |
| MTMR12 | Myotubularin related protein 12 | 3-PAP, PIP3AP | |
| MTMR14 | Myotubularin related protein 14 | C3orf29 | |
| MTMR15 | | | |
| MTMR2 | Myotubularin related protein 2 | CMT4B, CMT4B1 | |
| MTMR3 | Myotubularin related protein 3 | hCG_2011013, FYVE-DSP1, ZFYVE10 | |
| MTMR6 | Myotubularin related protein 6 | RP11-271M24.1 | |
| MTMR7 | Myotubularin related protein 7 | | |
| MTMR8 | Myotubularin related protein 8 | RP11-284B18.5 | |
| MTP18 | | | |
| MTPN | Myotrophin | GCDP, V-1 | |
| MTR | 5-methyltetrahydrofolate-homocysteine methyltransferase | HMAG, MS, cblG | |
| MTSS1 | Metastasis suppressor 1 | MIM, MIMA, MIMB | |
| MTUS1 | Microtubule associated tumor suppressor 1 | ATBP, ATIP, ICIS, MP44, MTSG1 | |
| MTUS2 | Microtubule associated tumor suppressor candidate 2 | CAZIP, ICIS, KIAA0774, TIP150 | |
| MTX2 | MTX2 | | |
| MTX3 | Metaxin 3 | | |
| MUC13 | Mucin 13, cell surface associated | UNQ6194/PRO20221, DRCC1, MUC-13 | |

| | | | |
|---------|--|--|---|
| MUC17 | Mucin 17, cell surface associated | MUC3 | |
| MUC19 | Mucin 19, oligomeric | MUC-19 | |
| MUC20 | Mucin 20, cell surface associated | UNQ2782/PRO7170, MUC-20 | |
| MUC5AC | Mucin 5AC, oligomeric mucus/gel-forming | MUC5, TBM, leB | |
| MUC7 | Mucin 7, secreted | MG2 | |
| MUDENG | | | |
| MUL1 | Mitochondrial E3 ubiquitin protein ligase 1 | MT11-401MT10.2, C10H100, GIDE, MAFL, MOLAN, DNF310 | |
| MUS81 | MUS81 structure-specific endonuclease | SLX3 | |
| MUT | Methylmalonyl CoA mutase | MCM | |
| MX2 | MX dynamin-like GTPase 2 | MXB | |
| MXD1 | MAX dimerization protein 1 | BHLHC58, MAD, MAD1 | |
| MXRA7 | Matrix-remodelling associated 7 | PS1TP1, TMAP1 | |
| MYADM | Myeloid-associated differentiation marker | UNQ553/PRO1110, SB135 | |
| MYB | v-myb avian myeloblastosis viral oncogene homolog-like 1 | RP1-32B1.1, Cmyb, c-myb, c-myb_CDS, efg | √ |
| MYBL1 | MYBL1 | A-MYB, AMYB | |
| MYBPC1 | Myosin binding protein C, slow type | LCCS4, MYBPCC, MYBPCS | |
| MYCBP | MYC binding protein | AMY-1 | |
| MYCBP2 | MYC binding protein 2, E3 ubiquitin protein ligase | AC001226.5, PAM | |
| MYCBPAP | MYCBP associated protein | AMAP-1, AMAP1 | |
| MYCN | v-myc avian myelocytomatosis viral oncogene neuroblastoma derived homolog-like 1 | MODED, N-myc, NMYC, ODED, bHLHe37 | √ |
| MYEF2 | Myelin expression factor 2 | HsT18564, MEF-2, MST156, MSTP156, myEF-2 | |
| MYEOV | Myeloma overexpressed | OCIM | |
| MYH10 | Myosin, heavy chain 10, non-muscle | NMMHC-IIB, NMMHCB | |
| MYH11 | Myosin, heavy chain 11, smooth muscle | AAT4, FAA4, SMHC, SMMHC | √ |
| MYH15 | Myosin, heavy chain 15 | | |
| MYH7B | myosin, heavy chain 7B, cardiac muscle, beta | RP4-756N5.1, MHC14, MYH14 | |
| MYL1 | Myosin, light chain 1, alkali; skeletal, fast | MLC1F, MLC3F | |
| MYL6 | myosin, light chain 6, alkali, smooth muscle and non-muscle | ESMLEC, LCT7, LCT7-G1, LCT7-NM, LCT7A, LCT7B, MLC2, MLC1SM, MLC2NM, MLC2SM | |
| MYLK3 | Myosin light chain kinase 3 | RP11-480G7.1, MLCK, MLCK2, caMLCK | |
| MYLK4 | Myosin light chain kinase family, member 4 | RP11-145H9.1, SgK085 | |
| MYO10 | Myosin X | | |
| MYO15A | Myosin XVA | DFNB3, MYO15 | |
| MYO16 | Myosin XVI | MT11-54117.1, MY1AF3, MY1K6, MYO100, MY1AF5, PPP1B107 | |

| | | | |
|---------|--|--|--|
| MYO18A | Myosin XVIII A | MYSPDZ, SPR210 | |
| MYO1C | Myosin IC | MMI-beta, MM1b, NMI, myr2 | |
| MYO1D | Myosin ID | PPP1R108, myr4 | |
| MYO1E | Myosin IE | FSGS6, HuncM-IC, MYO1C | |
| MYO3A | Myosin IIIA | DFNB30 | |
| MYO3B | Myosin IIIB | | |
| MYO5A | Myosin VA (heavy chain 12, myoxin) | GS1, MYH12, MYO5, MYR12 | |
| MYO5B | Myosin VB | | |
| MYO5C | Myosin VC | | |
| MYO6 | Myosin VI | RP3-472A9.1, DFNA22, DFNB37 | |
| MYO7B | Myosin VIIB | hCG_42606 | |
| MYO9B | Myosin IXB | CELIAC4, MYR5 | |
| MYOCD | Myocardin | MYCD | |
| MYOM1 | Myomesin 1 | SKELEMIN | |
| MYOM3 | Myomesin 3 | RP11-293P20.1 | |
| MYOZ3 | Myomesin 3 | RP11-293P20.1 | |
| MYPN | Myopalladin | CMD1DD, CMH22, MYOP, RCM4 | |
| MYRIP | Myosin VIIA and Rab interacting protein | SLAC2-C, SLAC2C | |
| MYSM1 | Myb-like, SWIRM and MPN domains 1 | RP4-592A1.1, 2A-DUB, 2ADUB | |
| MYST2 | K(lysine) acetyltransferase 7 | HBO1, HBOA, MYST2, ZC2HC7 | |
| MYST3 | K(lysine) acetyltransferase 6A | MOZ, MYST3, RUNXBP2, ZC2HC6A, ZNF220 | |
| N4BP1 | NEDD4 binding protein 1 | | |
| N4BP2L1 | NEDD4 binding protein 2-like 1 | RP11-298P3.2, CG018 | |
| N4BP3 | NEDD4 binding protein 3 | LZTS4 | |
| N6AMT1 | N(6)-adenine-specific DNA methyltransferase 1 | FKED28, C210H127, HEMK2, MTQ2, N6AMT1, HsaHsaK2P | |
| NAA15 | N(alpha)-acetyltransferase 15, NAT A | Ga19, NARG1, NAT1P, NATH, TBDN, TBDN100 | |
| NAA16 | N(alpha)-acetyltransferase 16, NAT A | RP11-396A22.1, NARG1L | |
| NAA25 | N(alpha)-acetyltransferase 25, NAT D | C12orf30, MDM20, NAP1 | |
| NAA30 | N(alpha)-acetyltransferase 30, NAT C catalytic subunit | C14orf35, MAK3, Mak3p, NAT12, NAT12P | |
| NAA35 | N(alpha)-acetyltransferase 35, NAT C | RP11-379P1.1, EGAP, MAK10, MAK10P, bA379P1.1 | |
| NAA40 | N(alpha)-acetyltransferase 40, NAT D catalytic subunit | NAT11, PATT1 | |
| NAA50 | N(alpha)-acetyltransferase 50, NAT E catalytic subunit | MAK5, NAT15, NAT15I, NAT5, NAT5I, SAN, hNAT5, hSAN | |
| NAAA | N-acylethanolamine acid amidase | ASAHL, PLT | |

| | | | |
|-----------|--|---|--|
| NAALAD2 | N-acetylated alpha-linked acidic dipeptidase | GCPIII, GPCIII, NAADALASE2, NAALADASE2 | |
| NAALADL2 | N-acetylated alpha-linked acidic dipeptidase-like 2 | | |
| NAB1 | Nucleolar 1-A binding protein 1 (EOK1 binding nucleus accumbens associated 1, DEN and BTP (BOZ) domain containing) | | |
| NACC1 | nucleus accumbens associated 1, DEN and BTP (BOZ) domain containing | BEND8, BTBD14B, BTBD30, NAC-1, NAC1 | |
| NAE1 | NEDD8 activating enzyme E1 subunit 1 | HPP1, A-116A10.1, APPBP1, ula-1 | |
| NAF1 | nuclear assembly factor 1 ribonucleoprotein | | |
| NAIP | NLR family, apoptosis inhibitory protein | BIRC1, NLRB1, psiNAIP | |
| NAMPT | Nicotinamide phosphoribosyltransferase | 1110035O14Rik, PBEF, PBEF1, VF, VISFATIN | |
| NANP | N-acetylneuraminic acid phosphatase | C20orf147, HDHD4, dJ694B14.3 | |
| NANS | N-acetylneuraminic acid synthase | RP11-404F11.3, HEL-S-100, SAS | |
| NAP1L1 | Nucleosome assembly protein 1-like 1 | NAP1, NAP1L, NRP | |
| NAP1L2 | Nucleosome assembly protein 1-like 2 | BPX | |
| NAP1L5 | Nucleosome assembly protein 1-like 5 | DRLM | |
| NAPB | N-acetylmaleimide-sensitive factor attachment protein beta | RP3-322G13.2, SNAP-BETA, SNAPB | |
| NARF | Nuclear prelamin A recognition factor | IOP2 | |
| NARG2 | | | |
| NAV1 | Neuron navigator 1 | POMFIL3, STEERIN1, UNC53H1 | |
| NAV2 | Neuron navigator 2 | HELAD1, POMFIL2, RAINB1, STEERIN2, UNC53H2 | |
| NBEA | Neurobeachin | RP11-270C18.1, BCL8B, LYST2 | |
| NBL1 | Neuroblastoma 1, DAN family DMR antagonist | RP5-1056L3.4, D1S1733E, DAN, DAND1, NB, NO3 | |
| NBLA00301 | HAND2 antisense RNA 1 (head to head) | DEIN; NBLA00301 | |
| NBN | Nibrin | AT-V1, AT-V2, ATV, NBS, NBS1, P95 | |
| NBPF10 | Neuroblastoma breakpoint family, member 10 | RP11-458D21.4, AB6, AG1, NBPF9 | |
| NBPF11 | Neuroblastoma breakpoint family, member 11 | RP11-94I2.2, NBPF24 | |
| NBPF14 | Neuroblastoma breakpoint family, member 14 | RP3-328E19.1, DJ328E19.C1.1, NBPF | |
| NBPF15 | Neuroblastoma breakpoint family, member 15 | RP11-763B22.1, AB14, AG3, NBPF16 | |
| NBPF16 | Neuroblastoma breakpoint family, member 16 | AG3 | |
| NBPF22P | Neuroblastoma breakpoint family, member 22 | | |
| NBPF3 | Neuroblastoma breakpoint family, member 3 | RP11-293F5.5, AE2 | |
| NBPF4 | Neuroblastoma breakpoint family, member 4 | RP11-483I13.1 | |
| NBPF5 | Neuroblastoma breakpoint family, member 5 | DKFZp434D177-like, RP11-242D10.1 | |
| NBPF8 | Neuroblastoma breakpoint family, member 8 | RP3-377D14.1P, NBPF8 | |
| NBR1 | Neighbor of BRCA1 gene 1 | MIG19, 1A1-3B, IAI3B, M17S2 | |

| | | | |
|------------|--|---|---|
| NBR2 | Neighbor of BRCA1 gene 2 (non-protein coding) | NCRNA00192 | |
| NCALD | Neurocalcin delta | | |
| NCAM1 | Neural cell adhesion molecule 1 | CD56, MSK39, NCAM | |
| NCAPG | Non-SMC condensin I complex, subunit G | CAPG, CHCG, NY-MEL-3, YCG1 | |
| NCAPG2 | Non-SMC condensin II complex, subunit G2 | tcag7.1258, CAP-G2, CAPG2, LUZP5, MTB, hCAP-G2 | |
| NCAPH | Non-SMC condensin I complex, subunit H | BRRN1, CAP-H | |
| NCAPH2 | Non-SMC condensin II complex, subunit H2 | | |
| NCBP1 | Nuclear cap binding protein subunit 1, 80 kDa | RP11-546O6.1, CBP80, NCBP, Sto1 | |
| NCBP2 | Nuclear cap binding protein subunit 2, 20 kDa | PIG55, CBC2, CBP20, NIP1 | |
| NCCRP1 | Non-specific cytotoxic cell receptor protein 1 homolog (zebrafish) | FBXO50, NCCRP-1 | |
| NCEH1 | Neutral cholesterol ester hydrolase 1 | AADAACL1, NCEH | |
| NCK2 | NCK adaptor protein 2 | GRB4, NCKbeta | |
| NCKAP5 | NCK-associated protein 5 | ERIH1, ERIH2, NAP5 | |
| NCKIPSD | NCK interacting protein with SH3 domain | AT5F21, DIF, DIF1, GNP1, SPIN90, VIF54, WASEB1, WISL | |
| NCL | Nucleolin | C23 | |
| NCOA1 | Nuclear receptor coactivator 1 | F-SRC-1, KAT13A, RIP160, SRC1, bHLHe42, bHLHe74 | √ |
| NCOA2 | Nuclear receptor coactivator 2 | GRIP1, KAT13C, NCoA-2, SRC2, TIF2, bHLHe75 | √ |
| NCOA3 | Nuclear receptor coactivator 3 | KF5-1049G10.5, ACTR, AID-1, AID1, CA0110, CTS-118, KAT13B, BAF3, SRC2, SRC3, SPG2, TRAF250, TRAF251 | |
| NCOA6 | Nuclear receptor coactivator 6 | PPP1F6, J11.1, LKAT140, LSINAI-AS, INDIA00052, NCL-10002, TLDCA, J1187H1.2, NCOA7 | |
| NCOA7 | Nuclear receptor coactivator 7 | N-CoR, N-CoR1, PPP1R109, TRAC1, hN-CoR | |
| NCOR1 | Nuclear receptor corepressor 1 | KF1-149M16.2, CD550, L195, INK-p44, INK44, J1140M18.1 | |
| NCR2 | Natural cytotoxicity triggering receptor 2 | | |
| NCRNA00051 | | | |
| NCRNA00085 | Sperm acrosome associated 6, pseudogene | LINC00085, NCRNA00085, SPACA6, SPACA6P | |
| NCRNA00086 | | | |
| NCRNA00094 | | | |
| NCRNA00095 | | | |
| NCRNA00103 | | | |
| NCRNA00107 | | | |
| NCRNA00119 | | | |
| NCRNA00120 | | | |
| NCRNA00171 | | | |
| NCRNA00173 | | | |

| | | | |
|-------------|--|--|--|
| NCRNA00176 | | | |
| NCRNA00181 | | | |
| NCRNA00183 | | | |
| NCRNA00189 | | | |
| NCRNA00203 | | | |
| NCRNA00204B | | | |
| NCRNA00222 | | | |
| NCRNA00236 | | | |
| NCS1 | Neuronal calcium sensor 1 | FLUP, FREQ | |
| NDEL1 | NudE neurodevelopment protein 1-like 1 | EOPA, MITAP1, NDE1L1, NDE2, NUDEL | |
| NDFIP2 | Nedd4 family interacting protein 2 | N4WBP5A | |
| NDRG2 | NDRG family member 2 | SYLD | |
| NDRG3 | NDRG family member 3 | RP3-460J8.1 | |
| NDRG4 | NDRG family member 4 | BDM1, SMAP-8, SMAP8 | |
| NDST2 | N-acetylase/N-sulfotransferase (heparan | HSST2, NST2 | |
| NDUFA10 | NADH dehydrogenase (ubiquinone) 1 alpha | CI-42KD, CI-42k | |
| NDUFA4 | NDUFA4, mitochondrial complex associated | CI-9k, CI-MLRQ, MLRQ | |
| NDUFA5 | NADH dehydrogenase (ubiquinone) 1 alpha | B13, CI-13KD-B, CI-13kB, NUFM, UQOR13 | |
| NDUFA7 | NADH dehydrogenase (ubiquinone) 1 alpha | B14.5a | |
| NDUFAB1 | NADH dehydrogenase (ubiquinone) 1, | ACP, FASN2A, SDAP | |
| NDUFAF2 | NADH dehydrogenase (ubiquinone) | B17.2L, MMTN, NDUFA12L, mimitin | |
| NDUFAF3 | NADH dehydrogenase (ubiquinone) | 2P1, C3orf60, E3-3 | |
| NDUFB1 | NADH dehydrogenase (ubiquinone) 1 beta | CI-MNLL, CI-SGDH, MNLL | |
| NDUFB5 | NADH dehydrogenase (ubiquinone) 1 beta | CISGDH, SGDH | |
| NDUFS3 | NADH dehydrogenase (ubiquinone) Fc-3 | CI-30 | |
| NEAT1 | nuclear paraspeckle assembly transcript 1 | LINC00084, NCRNA00084, TncRNA, VINC | |
| NEB | Nebulin | NEB177D, NEM2 | |
| NEBL | Nebulette | RP11-56H7.1, LASP2, LNEBL | |
| NECAB1 | N-terminal EF-hand calcium binding protein | EFCBP1, STIP-1 | |
| NEDD4 | Neural precursor cell expressed, | PIG53-1, RPF1, NEDD4 | |
| NEDD4L | Neural precursor cell expressed, | NEDD4-2, NEDD4.2, RSP5, hNEDD4-2 | |
| NEFH | Neurofilament, heavy polypeptide | NFH | |
| NEGR1 | Neuronal growth regulator 1 | UNQ2433, DMML2433, IGLON4, KILON, Ntra | |

| | | | |
|----------|--|---|---|
| NEK1 | NIMA-related kinase 1 | NY-REN-55, SRPS2, SRPS2A, SRTD6 | |
| NEK11 | NIMA-related kinase 11 | | |
| NEK4 | NIMA-related kinase 4 | NRK2, STK2, pp12301 | |
| NEK7 | NIMA-related kinase 7 | | |
| NEK9 | NIMA-related kinase 9 | NERCC, NERCC1, Nek8 | |
| NELL1 | NEL-like 1 (chicken) | IDH3GL, NRP1 | |
| NELL2 | NEL-like 2 (chicken) | NRP2 | |
| NEO1 | Neogenin 1 | IGDCC2, NGN, NTN1R2 | |
| NET1 | Neuroepithelial cell transforming 1 | RP11-116G8.1, ARHGEF8A, NET1 | |
| NETO1 | Neuropilin (NRP) and tolloid (TLL)-like 1 | RP11-713C5.1, BCTL1, BTCL1 | |
| NEURL1B | Neuralized E3 ubiquitin protein ligase 1B | NEURL3, hNeur2, neur2 | |
| NEUROD1 | Neuronal differentiation 1 | BETA2, BHF-1, MODY6, NEUROD, bHLHa3 | |
| NEUROG2 | Neurogenin 2 | Atoh4, Math4A, NGN2, bHLHa8, ngn-2 | |
| NEXN | Nexilin (F actin binding protein) | CMH20, NELIN | |
| NF1 | Neurofibromin 1 | NFNS, VRNF, WSS | √ |
| NF2 | Neurofibromin 2 (merlin) | ACN, BANF, SCH | √ |
| NFAM1 | NFAT activating protein with ITAM motif 1 | CTA-126B4.4, CNAIP, bK126B4.4 | |
| NFASC | Neurofascin | RP11-494K3.1, NF, NRCAML | |
| NFAT5 | nuclear factor of activated T-cells 5, tonicity-responsive | RP11-511C24.1, NF-AT5, NFATL1, NFAT2, OKEDI, TONEDD | |
| NFATC1 | nuclear factor of activated T-cells, 1 | NF-ATC, NFAT2, NFATc | |
| NFATC2IP | nuclear factor of activated T-cells, 2 | ESC2, NIP45, RAD60 | |
| NFATC4 | nuclear factor of activated T-cells, 4 | NF-AT3, NF-ATC4, NFAT3 | |
| NFE2L2 | Nuclear factor, erythroid 2-like 2 | NRF2 | √ |
| NFIA | Nuclear factor I/A | RP5-902P15.1, CTF, NF-I/A, NF1-A, NFI-A, NFI-L | |
| NFIB | Nuclear factor I/B | RP11-280G24.2, CTF, TIMGIC/NFIB, NF-I/B, NFI-B, NFI-D, NFI-BE2, NFI-BE3, NFI-BE2, NFI-BE1 | √ |
| NFKBIZ | nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor-3 | IKBZ, INAP, MAIL | |
| NFXL1 | nuclear transcription factor, X-box binding protein 1 | CDZFP, HOZFP, OZFP, URCC5 | |
| NFYA | Nuclear transcription factor Y, alpha | CBF-A, CBF-B, HAP2, NF-YA | |
| NFYB | Nuclear transcription factor Y, beta | CBF-A, CBF-B, HAP3, NF-YB | |
| NFYC | Nuclear transcription factor Y, gamma | RP5-1006H15.1, CBF-C, CBFc, H1112A, HAF3, HSM1, NF-YC | |
| NGEF | Neuronal guanine nucleotide exchange factor | ARHGEF27, EPHEXIN | |
| NHLRC1 | NHL repeat containing E3 ubiquitin protein ligase 1 | EPM2A, EPM2B, MALIN, bA204B7.2 | |
| NHLRC2 | NHL repeat containing 2 | 1200003G01Rik, AI835049, AV002846, AW496455 | |

| | | | |
|-----------|---|--|---|
| NHLRC3 | NHL repeat containing 3 | RP11-50D16.3 | |
| NHP2 | NHP2 ribonucleoprotein | HSPC286, DKCB2P, NOLA2, NHP2 | |
| NHS | Nance-Horan syndrome (congenital cataracts and dental anomalies) | RP3-389A20.6, CTRCT40, CXN, SCML1 | |
| NHSL1 | NHS-like 1 | C6orf63 | |
| NICN1 | Nicolin 1 | | |
| NID1 | Nidogen 1 | NID | |
| NID2 | Nidogen 2 (osteonidogen) | NID-2 | |
| NIN | Ninein (GSK3B interacting protein) | SCKL7 | v |
| NINL | Ninein-like | RP4-691N24.1, NLP, dJ691N24.1 | |
| NIPA1 | Non imprinted in Prader-Willi/Angelman syndrome 1 | FSP3, SPG6 | |
| NIPA2 | Non imprinted in Prader-Willi/Angelman syndrome 2 | | |
| NIPAL2 | NIPA-like domain containing 2 | NPAL2 | |
| NIPAL3 | NIPA-like domain containing 3 | RP3-462O23.3, DJ462O23.2, NPAL3 | |
| NIPAL4 | NIPA-like domain containing 4 | ARCI6, ICHTHYIN, ICHYN | |
| NIPBL | Nipped-B homolog (Drosophila) | CDLS, CDLS1, IDN3, IDN3-B, Scc2 | |
| NIPSNAP3B | Nipsnap homolog 3B (C. elegans) | NIPSNAP3 | |
| NISCH | Nischarin | I-1, IR1, IRAS, hIRAS | |
| NKAIN2 | Na ⁺ /K ⁺ transporting ATPase interacting 2 | RP1-305A19.1, FAM77B, NKAIP2, TCBA, TCBA1 | |
| NKIRAS1 | NFKB inhibitor interacting Ras-like 1 | KBRAS1, kappaB-Ras1 | |
| NKRF | NFKB repressing factor | ITBA4, NRF | |
| NKTR | Natural killer cell triggering receptor | p104 | |
| NKX2-2 | NK2 homeobox 2 | NKX2.2, NKX2B | |
| NKX2-4 | NK2 homeobox 4 | RP11-227D2.4, NKX2.4, NKX2D | |
| NKX3-2 | NK3 homeobox 2 | BAPX1, NKX3.2, NKX3B, SMMD | |
| NLE1 | Notchless homolog 1 (Drosophila) | HUSSY-07, Nle | |
| NLGN1 | Neurologin 1 | NL1 | |
| NLGN2 | Neurologin 2 | | |
| NLGN4X | Neurologin 4, X-linked | UTNQ565/PRO701, ASPGAZ, AUTSAZ, HENNA, HINL4X, NLGN4 | |
| NLGN4Y | Neurologin 4, Y-linked | | |
| NLK | Nemo-like kinase | | |
| NLN | Neurolysin (metallopeptidase M3 family) | AGTBP, EP24.16, MEP, MOP | |
| NLRC5 | NLR family, CARD domain containing 5 | CLR16.1, NOD27, NOD4 | |
| NLRP1 | NLR family, pyrin domain containing 1 | CARD7, CIDED, CLR17.1, DEFCAT, DEFCAT-L/S, NLRC5, NALP1, PR1044, SLEV1, VAMAS1 | |

| | | | |
|----------|--|--|---|
| NLRP8 | NLR family, pyrin domain containing 8 | CLR19.2, NALP8, NOD16, PAN4 | |
| NLRP9 | NLR family, pyrin domain containing 9 | CLR19.1, NALP9, NOD6, PAN12 | |
| NMD3 | NMD3 ribosome export adaptor | CGI-07 | |
| NME4 | NME/NUM25 nucleoside diphosphate kinase 4 | Z97634.4-011, NDPK-D, NM23H4, nm23-H4 | |
| NME6 | NME/NUM25 nucleoside diphosphate kinase 6 | IPIA-ALPHA, NDK 6, NM23-H6 | |
| NME7 | NME/NUM25 nucleoside diphosphate kinase 7 | CFAP67, MN23H7, NDK 7, NDK7, nm23-H7 | |
| NMI | N-myc (and STAT) interactor | | |
| NMNAT2 | Nicotinamide nucleotide adenyltransferase 2 | RP11-181K3.3, C1orf15, PNAT2 | |
| NMT1 | N-myristoyltransferase 1 | NMT | |
| NMT2 | N-myristoyltransferase 2 | RP11-455B2.2 | |
| NNAT | Neuronatin | Peg5 | |
| NNT | Nicotinamide nucleotide transhydrogenase | hCG_17428, GCCD4 | |
| NOC3L | Nucleolar complex associated 3 homolog (Drosophila) | AD24, C10orf117, FAD24 | |
| NOD1 | Nucleotide-binding oligomerization domain containing 1 | CARD4, CLR7.1, NLRC1 | |
| NOD2 | Nucleotide-binding oligomerization domain containing 2 | ACCG, BLAU, CARD15, CD, CLR10.3, IBD1, NLRC2, PSQAS1, NOD2 | |
| NOG | Noggin | SYM1, SYNS1 | |
| NOL4 | Nucleolar protein 4 | HRIHFB2255, CT125, NOLP | |
| NOL8 | Nucleolar protein 8 | RP11-62C3.9, C9orf34, NOP132, bA62C3.3, bA62C3.4 | |
| NOL9 | Nucleolar protein 9 | Grc3, NET6 | |
| NOLC1 | Nucleolar and coiled-body phosphoprotein 1 | NOPP130, NOPP140, NS5ATP13, P130 | |
| NOM1 | Nucleolar protein with MIF4G domain 1 | C7orf3, PPP1R113, SGD1 | |
| NOMO1 | NODAL modulator 1 | Nomo, PM5 | |
| NOMO2 | NODAL modulator 2 | Nomo, PM5 | |
| NOMO3 | NODAL modulator 3 | Nomo | |
| NOP58 | NOP58 ribonucleoprotein | HSPC120, NOP5, NOP5/NOP58 | |
| NOS1 | Nitric oxide synthase 1 (neuronal) | IHPS1, N-NOS, NC-NOS, NOS, bNOS, nNOS | |
| NOS1AP | Nitric oxide synthase 1 (neuronal) adaptor protein | 6330408P19Rik, CAPON | |
| NOS3 | Nitric oxide synthase 3 (endothelial cell) | ECNOS, eNOS | |
| NOTCH2 | Notch 2 | AGS2, HJCYS, hN2 | v |
| NOTCH2NL | Notch 2 N-terminal like | N2N | |
| NOTCH3 | Notch 3 | CADASIL, CASIL, IMF2 | |
| NOTCH4 | Notch 4 | DAQB-143M3.4, INT3 | |
| NOTUM | Notum peptidylacetylesterase homolog (Drosophila) | OK/SW-CL.30 | |

| | | | |
|-----------|---|--|---|
| NOV | Nephroblastoma overexpressed | CCN3, IBP-9, IGFBP-9, IGFBP9h, NOV | |
| NOVA1 | Neuro-oncological ventral antigen 1 | Nova-1 | |
| NOX1 | NADPH oxidase 1 | RP1-146H21.1, GP91-2, MOX1, NOH-1, NOH1 | |
| NOX4 | NADPH oxidase 4 | KOX, KOX-1, RENOX | |
| NOX5 | NADPH oxidase, EF-hand calcium binding domain 5 | | |
| NPAS3 | Neuronal PAS domain protein 3 | MOP6, PASD6, bHLHe12 | |
| NPAT | Nuclear protein, ataxia-telangiectasia locus | E14, E14/NPAT, p220 | |
| NPC1 | Niemann-Pick disease, type C1 | NPC | |
| NPEPL1 | Aminopeptidase-like 1 | RP11-261P9.1, bA261P9.2 | |
| NPEPPS | Aminopeptidase puromycin sensitive | AAP-S, MP100, PSA | |
| NPFFR2 | Neuropeptide FF receptor 2 | GPR74, HLWAR77, NPFF2, NPGPR | |
| NPIPL3 | Nuclear pore complex interacting protein 3 | | |
| NPM1 | Nucleophosmin (Nucleolar phosphoprotein P22, nucleolar) | B23, NPM | √ |
| NPR3 | Natriuretic peptide receptor 3 | hCG_1781939, ANP-C, ANPK-C, ANPKC, C50H25, ZUCX02P-003, CTODP3, COTIDA, HS-40, MAKL, NRP3, RMD11 | |
| NPRL3 | Nitrogen permease regulator-like 3 (N. communis) | | |
| NPTN | Neuroplastin | GP55, GP65, SDFR1, SDR1, np55, np65 | |
| NPTXR | Neuronal pentraxin receptor | NPR | |
| NR_027144 | | | |
| NR1D2 | Nuclear receptor subfamily 1, group D, | BD73, EAR-1R, RVR | |
| NR1H4 | Nuclear receptor subfamily 1, group H, | BAR, FXR, HRR-1, HRR1, RIP14 | |
| NR1I3 | Nuclear receptor subfamily 1, group I, | CAR, CAR1, MB67 | |
| NR2C2 | Nuclear receptor subfamily 2, group C, | TAK1, TR4 | |
| NR2E1 | Nuclear receptor subfamily 2, group E, | RP3-429G5.1, TLL, TLX, XTLL | |
| NR2F2 | Nuclear receptor subfamily 2, group F, | ANK1, CHFD4, COU1FB, COU1FH, NF-E3, NR2F1, SVD40, TEGOUR2 | |
| NR3C1 | Nuclear receptor subfamily 3, group C, | GCCR, GCR, GCRST, GR, GRL | |
| NR3C2 | Nuclear receptor subfamily 3, group C, | MCR, MLR, MRVIT, NR3C2 | |
| NR4A2 | Nuclear receptor subfamily 4, group A, | HZF-3, NOT, NURR1, RNR1, TINUR | |
| NR4A3 | Nuclear receptor subfamily 4, group A, | RP11-60I3.3, CHN, CSMF, MINOR, NOR1, TEC | √ |
| NR5A1 | Nuclear receptor subfamily 5, group A, | RP11-10TK10.1, AD4BF, ELI, FTZ1, FTZ1F, FOF1, SF-1, SF1, SRCF2, SRXV2 | |
| NR6A1 | Nuclear receptor subfamily 6, group A, | CT150, GCNF, GCNF1, NR61, RTR, hGCNF, hRTR | |
| NRAS | Neuroblastoma RAS viral (v-ras) oncogene homolog | RP3-1000E10.2, ALT34, CIMNS, N-ras, NCM31, NS0, NRAS | √ |
| NRCAM | Neuronal cell adhesion molecule | | |
| NRF1 | Nuclear respiratory factor 1 | ALPHA-PAL | |

| | | | |
|--------|---|--|---|
| NRG1 | Neuregulin 1 | ANKA, GGF, GGF2, HGL, HRG, HRG1, HRGA, MST121, MSTB121, NDF, IT2, SMDF, NRG1 | |
| NRGN | Neurogranin (protein kinase C substrate, PKC) | RC3, hng | |
| NRIP1 | Nuclear receptor interacting protein 1 | RIP140 | |
| NRIP2 | Nuclear receptor interacting protein 2 | | |
| NRIP3 | Nuclear receptor interacting protein 3 | C11orf14, NY-SAR-105 | |
| NRK | Nik related kinase | RP1-82J11.1, NESK | |
| NRP1 | Neuropilin 1 | RP11-342D11.1, BDCA4, CD304, NP1, NRP, VEGFR3 | |
| NRSN1 | Neurensin 1 | RP11-176J5.1, VMP, p24 | |
| NRSN2 | Neurensin 2 | RP5-1103G7.8, C20orf98, dJ1103G7.6 | |
| NRXN1 | Neurexin 1 | Hs.22998, PTHSL2, SCZD17 | |
| NRXN3 | Neurexin 3 | C14orf60 | |
| NSD1 | Nuclear receptor binding SET domain protein 1 | ARA267, KMT3B, SOTOS, SOTOS1, STO | √ |
| NSF | N-ethylmaleimide-sensitive factor | SKD2 | |
| NSL1 | NSL1, MST2 kinetochore complex | DC8, C1orf48, MIS14 | |
| NSMAF | Neuronal sphingomyelinase (NS-3) associated factor | FAN | |
| NSUN3 | NOP2/Sun domain family, member 3 | MSTP077, MST077 | |
| NSUN7 | NOP2/Sun domain family, member 7 | | |
| NT5C1B | 5'-Nucleotidase, cytosolic IB | FKSG85, AIRP, CN-IB, CN1B | |
| NT5C2 | 5'-Nucleotidase, cytosolic II | RP11-30H12.3, GMP, NT5B, PNT5, SFG43, SFG63, CN-II | √ |
| NT5DC1 | 5'-Nucleotidase domain containing 1 | RP3-486I3.1, C6orf200, LP2642, NT5C2L1 | |
| NT5DC3 | 5'-Nucleotidase domain containing 3 | TU12B1-TY, TU12B1TY | |
| NT5E | 5'-Nucleotidase, ecto (CD73) | RP11-321N4.1, CAL3A, CD73, ESN1, NT, NT5, NTE, NNT | |
| NTM | Neurotrimin | UNQ297/PRO337, HNT, IGLON2, NTRI | |
| NTNG1 | Netrin G1 | UNQ571/PRO1133, Lmnt1 | |
| NTRK2 | Neurotrophic tyrosine kinase, receptor, type 2 | RP11-263K15.1, GP145-TrkB, TRKB, trk-B | |
| NTS | Neurotensin | NMN-125, NN, NT, NT/N1, NTS | |
| NTSR1 | Neurotensin receptor 1 (high affinity) | NTR | |
| NUAK2 | NUAK family, SNF1-like kinase, 2 | SNARK | |
| NUB1 | Negative regulator of ubiquitin-like proteins 1 | BS4L, NYREN18, NUB1 | |
| NUBP1 | Nucleotide binding protein 1 | NBP, NBP1, NBP35 | |
| NUBPL | Nucleotide binding protein-like | C14orf127, IND1, huInd1 | |
| NUCB2 | Nucleobindin 2 | HEL-S-109, NEF | |
| NUCKS1 | Nuclear casein kinase and cyclin-dependent kinase substrate 1 | JC7, NUCKS | |

| | | | |
|----------|--|---|---|
| NUDCD3 | NudC domain containing 3 | hCG_18301, NudCL | |
| NUDT10 | Nucleoside diphosphate kinase 10 | RP11-348F1.4, APS2, DIPP3a, hDIPP3alpha | |
| NUDT12 | Nucleoside triphosphate kinase 12 | | |
| NUDT13 | Nucleoside triphosphate kinase 13 | RP11-152N13.13-004 | |
| NUDT16 | Nucleoside triphosphate kinase 16 | | |
| NUDT16L1 | Nucleoside triphosphate kinase 16L1 | SDOS | |
| NUDT16P1 | Nucleoside triphosphate kinase 16P1 | NUDT16P | |
| NUDT18 | Nucleoside triphosphate kinase 18 | MTH3 | |
| NUDT19 | Nucleoside triphosphate kinase 19 | RP2 | |
| NUDT21 | Nucleoside triphosphate kinase 21 | CFIM25, CPSF5 | |
| NUDT4 | Nucleoside triphosphate kinase 4 | HDCMB47P, DIPP2, DIPP2alpha, DIPP2beta | |
| NUDT4P1 | Nucleoside triphosphate kinase 4P1 | | |
| NUFIP1 | Nuclear fragile X mental retardation protein 1 | NUFIP, bA540M5.1 | |
| NUFIP2 | Nuclear fragile X mental retardation protein 2 | PIG1, 182-FIP, 82-FIP, FIP-82 | |
| NUP153 | Nucleoporin 153 kDa | HNUP153, N153 | |
| NUP160 | Nucleoporin 160 kDa | | |
| NUP50 | Nucleoporin 50 kDa | CTA-268H5.7, NPAP60, NPAP60L | |
| NUP98 | Nucleoporin 98 kDa | ADIR2, NUP196, NUP96 | v |
| NUPL2 | Nucleoporin like 2 | CG1, NLP-1, NLP_1, hCG1 | |
| NUS1 | Nuclear unaccaprenyl pyrophosphate kinase 1 | C6orf68, MGC:7199, NgBR, TANGO14 | |
| NWD1 | Nuclear pore complex domain containing 1 | A230063L24Rik | |
| NXF4 | Nuclear RNA export factor 4 pseudogene | | |
| NXPH1 | Neurexophilin 1 | Nbla00697, NPH1 | |
| NXPH2 | Neurexophilin 2 | NPH2 | |
| NXT2 | Nuclear transport factor 2-like export factor 2 | RP4-596C15.2, P15-2 | |
| OAS2 | 2'-5'-Oligoadenylate synthetase 2, 69/71 kDa | | |
| OAT | Ornithine aminotransferase | GACR, HOGAASE, OKT, OAT | |
| OAZ1 | Ornithine decarboxylase antizyme 1 | AZI, OAZ | |
| OBFC1 | Oligonucleotide/oligosaccharide-binding factor 1 | RP11-341N10.2, AAF144, AAF144, NFA-52, STN1, LA541N10.2 | |
| OBFC2A | Oligonucleotide/oligosaccharide-binding factor 2A | EGK_04635 | |
| OBSCN | Obscure, cytoskeletal component and tumor suppressor protein | RP5-1139B12.1, ARHGEF30, UNC89 | |
| OCA2 | Oculocutaneous albinism II | BET, BET1, BET2, BOCA, DTST2, ETCL, ETCL2, EXCL2, HCL2, P. BED, SHER1 | |
| OCIAD1 | OCIA domain containing 1 | ASRIJ, OCIA, TPA018 | |

| | | | |
|---------|---|--|--|
| ODC1 | Ornithine decarboxylase 1 | ODC | |
| ODF2L | Outer dense fiber of sperm tails 2-like | RP5-977L11.1, dJ977L11.1 | |
| ODZ1 | Odz, odd Oz/ten-m homolog 1 (Drosophila) | BOS_25167 | |
| ODZ3 | Odz (odd Oz/ten-m, Drosophila) homolog 3 | | |
| ODZ4 | Odz, odd Oz/ten-m homolog 4 (Drosophila) | BOS_24429 | |
| OGFRL1 | Opioid growth factor receptor-like 1 | dJ331H24.1 | |
| OGN | Osteoglycin | OG, OIF, SLRR3A | |
| OGT | O-linked N-acetylglucosamine (O-GlcNAc) transferase | HRNT1, O-GLCNAC | |
| OIT3 | oncprotein induced transcript 3 | UNQ826/PRO1753, LZP | |
| OLFM1 | Olfactomedin 1 | RP11-399H11.1, AMY, NOE1, NOELIN1, OlfA | |
| OLFM3 | Olfactomedin 3 | RP11-556K13.2, NOE3, NOELIN3, OPTIMEDIN | |
| OLFML2A | Olfactomedin-like 2A | RP11-175D17.4, PRO34319 | |
| OMA1 | OMA1 zinc metallopeptidase | Z010001009KIK, DADB1, MIPK1-1, TIKK087C, ZMPOMA1-peptidase | |
| ONECUT2 | One cut homeobox 2 | OC-2, OC2 | |
| OPA3 | Optic atrophy 3 (autosomal recessive, with cone and rod photoreceptor degeneration) | MGA3 | |
| OPHN1 | Oligophrenin 1 | RP6-201G10.1, ARHGAP41, MRX60, OPN1 | |
| OPN5 | Opsin 5 | GPR136, GRP136, PGR12, TMEM13 | |
| OPRK1 | Opioid receptor, kappa 1 | K-OR-1, KOR, KOR-1, OPRK | |
| OPRM1 | Opioid receptor, mu 1 | LMOR, M-OR-1, MOP, MOR, MOR1, OPRM | |
| OR12D3 | Olfactory receptor, family 12, subfamily D, | DADB-136A24.10-001, hs6M1-27 | |
| OR1J2 | Olfactory receptor, family 1, subfamily J, | RP11-342K25.4, HG152, HSA3, OK155, OK155, OK9- | |
| OR51E1 | Olfactory receptor, family 51, subfamily E, | 1A-OR51E1, 1B-OR51E1, OR150, OR104F, OR52A5F, | |
| OR51E2 | Olfactory receptor, family 51, subfamily E, | BOCB, PSGR2, OR51E1 | |
| OR6W1P | Olfactory receptor, family 6, subfamily w, | hCG_2044604, OR51E3P, OR52A2, PSGR | |
| OR7E91P | Olfactory receptor, family 7, subfamily E, | | |
| ORAI2 | ORAI calcium release-activated calcium modulator 2 | PP1729, C7orf19, CBCIP2, MEM142B, TMEM142B | |
| ORAOV1 | Oral cancer overexpressed 1 | TAOS | |
| ORC1L | Origin recognition complex, subunit 1 | BOS_3528ORC1L | |
| ORC3L | Origin recognition complex, subunit 3 | RP3-486L4.1, LAT, LATHEOL, ORC3 | |
| ORC4L | Origin recognition complex, subunit 4 | ORC4LP, ORC4 | |
| ORMDL1 | ORMDL sphingolipid biosynthesis regulator 1 | HSPC202 | |
| ORMDL3 | ORMDL sphingolipid biosynthesis regulator 3 | | |
| OSBP2 | Oxysterol binding protein 2 | RP3-430N8.7, HLM, ORP-4, ORP4, OSBPL1, OSBPL4 | |

| | | | |
|-----------|---|-------------------------------------|--|
| OSBPL10 | Oxysterol binding protein-like 10 | ORP10, OSBP9 | |
| OSBPL11 | Oxysterol binding protein-like 11 | ORP-11, ORP11, OSBP12, TCCCIA00292 | |
| OSBPL1A | Oxysterol binding protein-like 1A | ORP-1, ORP1, OSBPL1B | |
| OSBPL2 | Oxysterol binding protein-like 2 | RP11-157P1.2, ORP-2, ORP2 | |
| OSBPL3 | Oxysterol binding protein-like 3 | ORP-3, ORP3, OSBP3 | |
| OSBPL6 | Oxysterol binding protein-like 6 | ORP6 | |
| OSBPL8 | Oxysterol binding protein-like 8 | MST120, MSTP120, ORP8, OSBP10 | |
| OSGIN2 | Oxidative stress induced growth inhibitor family member 2 | C8orf1, hT41 | |
| OSTF1 | Osteoclast stimulating factor 1 | OSF, SH3P2, bA235O14.1 | |
| OSTM1 | Osteoporosis associated transmembrane protein 1 | HSPC019, GIPN, GL, OPTB5 | |
| OTUB2 | OTU deubiquitinase, ubiquitin adenylation 2 | C14orf137, OTB2, OTU2 | |
| OTUD1 | OTU deubiquitinase 1 | DUBA7, OTDC1 | |
| OTUD3 | OTU deubiquitinase 3 | RP11-460G22.1, DUB | |
| OTUD4 | OTU deubiquitinase 4 | DUBA6, HIN1, HSHIN1 | |
| OTUD6B | OTU domain containing 6B | CGI-77, DUBA-5, DUBA5 | |
| OTUD7A | OTU deubiquitinase 7A | C15orf16, C16ORF15, CEZANNE2, OTUD7 | |
| OTX2OS1 | Orthodenticle homolog 2 opposite strand 1 | RP23-131O4.2 | |
| OVOS | Ovostatin | | |
| OXCT1 | 3-Oxoacid CoA transferase 1 | OXCT, SCOT | |
| OXGR1 | Oxoglutarate (alpha-ketoglutarate) receptor 1 | GPR80, GPR99, P2RY15, P2Y15, aKGR | |
| OXNAD1 | Oxidoreductase NAD-binding domain containing 1 | | |
| OXNAD1 | Oxidoreductase NAD-binding domain containing 1 | | |
| P2RX7 | Purinergic receptor P2X, ligand-gated ion channel 7 | P2X7 | |
| P4HA2 | Prolyl 4-hydroxylase, alpha polypeptide II | UNQ290/PRO330 | |
| P4HA3 | Prolyl 4-hydroxylase, alpha polypeptide III | UNQ711/PRO1374 | |
| PAAF1 | Proteasomal ATPase-associated factor 1 | PAAF, Rpn14, WDR71 | |
| PABPC1 | Poly(A) binding protein, cytoplasmic 1 | PAB1, PABP, PABP1, PABPC2, PABPL1 | |
| PABPC1L2B | Poly(A) binding protein, cytoplasmic 1-like 2B | RP11-493K23.2, RBM32B | |
| PABPC1P2 | Poly(A) binding protein, cytoplasmic 1 pseudogene | | |
| PABPC4L | Poly(A) binding protein, cytoplasmic 4-like | hCG_1647909 | |
| PABPC5 | Poly(A) binding protein, cytoplasmic 5 | 5 | |
| PACRGL | PARK2 co-regulated-like | C4orf28 | |
| PACS2 | Phosphofurin acidic cluster sorting protein 2 | PACS-2, PACS1L | |

| | | | |
|-------------|---|---|---|
| PADI1 | Peptidyl arginine deiminase, type I | HPAD10, PAD1, PDI, PDI1 | |
| PAFAH1B1 | platelet-activating factor acetylhydrolase 1b, class B | LIS1, LIS2, MDCR, MDS, PAFAH | |
| PAFAH1B2 | platelet-activating factor acetylhydrolase 1b, class B | HEL-S-303 | v |
| PAFAH2 | platelet-activating factor acetylhydrolase 2, class B | RP11-111D20.1, HSD-PLA2 | |
| PAG1 | phosphoprotein membrane anchor with phosphatidylinositol 4-kinase type I activity | CBP, PAG | |
| PAH | Phenylalanine hydroxylase | PH, PKU, PKU1 | |
| PAK2 | P21 protein (Cdc42/Rac)-activated kinase 2 | PAK65, PAKgam | |
| PAK4 | P21 protein (Cdc42/Rac)-activated kinase 4 | | |
| PAK6 | P21 protein (Cdc42/Rac)-activated kinase 6 | PAK5 | |
| PAK7 | P21 protein (Cdc42/Rac)-activated kinase 7 | RP5-1119D9.3, PAK5 | |
| PALLD | Palladin, cytoskeletal associated protein | CGI-151, CGI151, MYN, PNCA1, SIH002 | |
| PALM2 | Paralemmin 2 | AKAP2 | |
| PALM2-AKAP2 | PALM2-AKAP2 readthrough | hCG_28765, AKAP2 | |
| PAM | peptidylglycine alpha-amidating monooxygenase | | |
| PAN3 | Pan3p | YKL025CECM35 | |
| PANK1 | Pantothenate kinase 1 | PANK | |
| PANK2 | Pantothenate kinase 2 | RP4-681N20.1, C20orf48, HARP, HSS, NBIA1, PKAN | |
| PANK3 | Pantothenate kinase 3 | | |
| PANK4 | Pantothenate kinase 4 | RP3-395M20.4 | |
| PANX1 | Pannexin 1 | px1 | |
| PAPD4 | PAP associated domain containing 4 | GLD2, TUT2 | |
| PAPD5 | PAP associated domain containing 5 | TRF4-2 | |
| PAPD7 | PAP associated domain containing 7 | LAK-1, LAK1, POLK, POLS, TRF4, TRF4-1, TRF41, TUTASE5 | |
| PAPLN | rapam, proteoglycan-like sulfated glycoprotein | UNQ2420/PRO4977 | |
| PAPOLA | Poly(A) polymerase alpha | PAP | |
| PAPOLB | Poly(A) polymerase beta (testis specific) | PAPT, TPAP | |
| PAPOLG | Poly(A) polymerase gamma | | |
| PAPPA | pregnancy-associated plasma protein A, subunit 1 | RP11-45A10.1, ASDAD12, DIFLAI, IGFBP-4ase, PAPA, PAPP-A1, PAPPB | |
| PAPPA2 | Pappalysin 2 | RP4-774I24.1, PAPP-A2, PAPP-E, PAPPB, PLAC3 | |
| PAQR5 | progesterin and adipoQ receptor family member V | MPRG | |
| PAQR9 | progesterin and adipoQ receptor family member IX | | |
| PAR1 | | | |
| PARD6B | Par-6 family cell polarity regulator beta | PAR6B | |

| | | | |
|--------|--|---|---|
| PARD6G | Par-6 family cell polarity regulator gamma | | |
| PARG | Poly (ADP-ribose) glycohydrolase | RP11-507K13.299, PARG | |
| PARK2 | Parkin RBR E3 ubiquitin protein ligase | KB-152G3.1, AR-JP, LPRS2, PDJ, PRKN | |
| PARM1 | Prostate androgen-regulated mucin-like protein 1 | UNQ1879/TKO4322, Cipart1, DNFZ150+00823, FANM-1, WSC4 | |
| PARN | Poly(A)-specific ribonuclease | DAN | |
| PARP1 | Poly (ADP-ribose) polymerase 1 | RP11-125A13.2, ADPRT, ADPRT1, ADPRT11, ARTD1, PAPP, PAPP-1, PPO1, ADPRT-1 | |
| PARP11 | Poly (ADP-ribose) polymerase family, member 11 | ARTD11, C12orf6, MIB006 | |
| PARP14 | Poly (ADP-ribose) polymerase family, member 14 | ARTD8, BAL2, PARP-14, pART8 | |
| PARP2 | Poly (ADP-ribose) polymerase 2 | ARTD2, Adprt2, Adprt12, Aspart12, C78626, PARP-2 | |
| PARP9 | Poly (ADP-ribose) polymerase family, member 9 | ARTD9, BAL, BAL1, MGC:7868 | |
| PARVA | Parvin, alpha | CH-ILKBP, MXRA2 | |
| PATE3 | Prostate and testis expressed 3 | hCG_2036778, HEL-127, PATE-DJ | |
| PATE4 | Prostate and testis expressed 4 | PATE-B | |
| PATL1 | Protein associated with topoisomerase II | OK/KNS-cl.5, Pat1b, hPat1b | |
| PATZ1 | POZ (BTB) and TAZ1 hook containing zinc finger 1 | MAZK, PATZ, KIAZ, ZBTB19, ZNF278, ZSO, JH00N02 | |
| PAWR | PRKC, apoptosis, WT1, regulator | PAR4, Par-4 | |
| PAX3 | Paired box 3 | CDHS, HUP2, WS1, WS3 | √ |
| PAX5 | Paired box 5 | ALL3, BSAP | √ |
| PAX6 | Paired box 6 | AN, AN2, D11S812E, FVH1, MGDA, WAGR | |
| PAX7 | Paired box 7 | HUP1B, RMS2, PAX7 | √ |
| PAX9 | Paired box 9 | STHAG3 | |
| PAXIP1 | PAX interacting (with transcription-activating domain) protein 1 | CAGF28, CAGF29, PACIP1L, PTIP, TNRC2, PAXIP1 | |
| PBK | PDZ binding kinase | CT84, HEL164, Nori-3, SPK, TOPK | |
| PBLD | Pteridine biosynthesis-like protein domain containing | MAWBP, MAWDBP | |
| PBRM1 | Polybromo 1 | BAF180, PB1 | √ |
| PBX1 | Pre-B-cell leukemia homeobox 1 | | √ |
| PBX2 | Pre-B-cell leukemia homeobox 2 | DAAP-218M18.5, G17, HOX12MHC, PBX2 | |
| PBX3 | Pre-B-cell leukemia homeobox 3 | RP11-336P12.1 | |
| PCA3 | Prostate cancer associated 3 (non-protein coding) | DD3, NCRNA00019, PCAT3 | |
| PCBD2 | Protein 4 alpha-carbomorphine dehydratase/dimerization cofactor of | DCOH2, DCOHM, PHS2 | |
| PCBP1 | Poly(rC) binding protein 1 | HEL-S-85, HNRPE1, HNRPX, hnRNP-E1, hnRNP-X | |
| PCBP2 | Poly(rC) binding protein 2 | HNRNPE2, HNRPE2, hnRNP-E2 | |
| PCCA | Propionyl CoA carboxylase, alpha subunit | | |

| | | | |
|----------|---|--|--|
| PCCB | Propionyl CoA carboxylase, beta subunit | | |
| PCDH11X | Protocadherin 11 X-linked | RP11-138F13.1, PCDH11X, PCDH11, PCDH1A, PCDH1B, PCDH1C | |
| PCDH11Y | Protocadherin 11 Y-linked | PCDH-PC, PCDH22, PCDHX, PCDHY | |
| PCDH15 | Protocadherin-related 15 | RP11-449J3.2, CDHR15, DFNB23, USH1F | |
| PCDH17 | Protocadherin 17 | PCDH68, PCH68 | |
| PCDH19 | Protocadherin 19 | RP11-99E24.1, EFMR, EIEE9 | |
| PCDH20 | Protocadherin 20 | PCDH13 | |
| PCDH7 | Protocadherin 7 | BH-Pcdh, BHPCDH, PPP1R120 | |
| PCDHA1 | Protocadherin alpha 1 | PCDH-ALPHA1 | |
| PCDHA10 | Protocadherin alpha 10 | CNR8, CNRN8, CNRS8, CRNR8, PCDH-ALPHA10 | |
| PCDHA11 | Protocadherin alpha 11 | CNR7, CNRN7, CNRS7, CRNR7, PCDH-ALPHA11 | |
| PCDHA12 | Protocadherin alpha 12 | PCDH-ALPHA12 | |
| PCDHA13 | Protocadherin alpha 13 | CNR5, CNRN5, CNRS5, CRNR5, PCDH-ALPHA13 | |
| PCDHA2 | Protocadherin alpha 2 | PCDH-ALPHA2 | |
| PCDHA3 | Protocadherin alpha 3 | PCDH-ALPHA3 | |
| PCDHA4 | Protocadherin alpha 4 | CNR1, CNRN1, CRNR1, PCDH-ALPHA4 | |
| PCDHA5 | Protocadherin alpha 5 | CNR6, CNRN6, CNRS6, CRNR6, PCDH-ALPHA5 | |
| PCDHA6 | Protocadherin alpha 6 | CNR2, CNRN2, CNRS2, CRNR2, PCDH-ALPHA6 | |
| PCDHA7 | Protocadherin alpha 7 | CNR4, CNRN4, CNRS4, CRNR4, PCDH-ALPHA7 | |
| PCDHA8 | Protocadherin alpha 8 | PCDH-ALPHA8 | |
| PCDHA9 | Protocadherin alpha 9 | PCDH-ALPHA9 | |
| PCDHAC1 | Protocadherin alpha subfamily C, 1 | PCDH-ALPHA-C1 | |
| PCDHAC2 | Protocadherin alpha subfamily C, 2 | PCDH-ALPHA-C2 | |
| PCDHB19P | Protocadherin beta 19 pseudogene | PCDHB19; PCDH-PSI5 | |
| PCDHB3 | Protocadherin beta 3 | PCDH-BETA3 | |
| PCDHB4 | Protocadherin beta 4 | PCDH-BETA4 | |
| PCDHB6 | Protocadherin beta 6 | PCDH-BETA6 | |
| PCDHB7 | Protocadherin beta 7 | PCDH-BETA7 | |
| PCF11 | PCF11 cleavage and polyadenylation factor subunit | | |
| PCGF2 | Polycomb group ring finger 2 | MEL-18, RNF110, ZNF144 | |
| PCGF3 | Polycomb group ring finger 3 | DONG1, RNF3, RNF3A | |
| PCGF5 | Polycomb group ring finger 5 | RNF159 | |
| PCGF6 | Polycomb group ring finger 6 | MBLR, RNF134 | |

| | | | |
|---------|---|--|---|
| PCID2 | PCI domain containing 2 | RP11-98F14.6, F10 | |
| PCLO | Piccolo presynaptic cytomatrix protein | tcag7.1085, ACZ | |
| PCNA | Proliferating cell nuclear antigen | ATLD2 | |
| PCNP | PCNP1 proteolytic signal containing nuclear protein | Ab2-416 | |
| PCNT | Pericentrin | KEN, MOPD2, PCN2, PCNTB, PCTN2, SCKL4, PCNT | |
| PCNX | Pecanex homolog (Drosophila) | PCNXL1, pecanex | |
| PCSK1 | Proprotein convertase subtilisin/kexin type 1 | BMIQ12, NEC1, PC1, PC3, SPC3 | |
| PCSK2 | Proprotein convertase subtilisin/kexin type 2 | NEC 2, NEC-2, NEC2, PC2, SPC2 | |
| PCSK5 | Proprotein convertase subtilisin/kexin type 5 | RP11-422N19.4, PC5, PC6, PC6A, SPC6 | |
| PCSK6 | Proprotein convertase subtilisin/kexin type 6 | PACE4, SPC4 | |
| PCSK9 | Proprotein convertase subtilisin/kexin type 9 | PSEC0052, PHS, PCHOLAS, EDLCQ1, NARC-1, NARGL, PC9 | |
| PCYOX1 | Prenylcysteine oxidase 1 | UNQ597/PRO1183, PCL1 | |
| PCYT1B | Phosphatase cytidylyltransferase 1, chromo, beta | CCTB, CTB | |
| PDAP1 | PDGFA associated protein 1 | HASPP28, PAP, PAP1 | |
| PDCD10 | Programmed cell death 10 | CCM3, TFAR15 | |
| PDCD2 | Programmed cell death 2 | RP1-191N21.2, RP8, ZMYND7 | |
| PDCD4 | Programmed cell death 4 (neoplastic transformation inhibitor) | RP11-348N5.4, H731 | |
| PDCD6 | Programmed cell death 6 | ALG-2, PEF1B | |
| PDCD6IP | Programmed cell death 6 interacting protein | AIP1, ALIX, DRIP4, HP95 | |
| PDCL | Phosducin-like | RP11-465F21.2, PhLP | |
| PDE10A | Phosphodiesterase 10A | HSPDE10A | |
| PDE11A | Phosphodiesterase 11A | PPNAD2 | |
| PDE12 | Phosphodiesterase 12 | 2'-PDE | |
| PDE1B | Phosphodiesterase 1B, cAMP-dependent | PDE1B1, PDES1B | |
| PDE2A | Phosphodiesterase 2A, cGMP-stimulated | CGS-PDE1, PED2A4, cGSPDE, PDE2A | |
| PDE3B | Phosphodiesterase 3B, cGMP-inhibited | HcGIP1, cGIPDE1 | |
| PDE4B | Phosphodiesterase 4B, cAMP-specific | RP5-876C12.1, DPDE4, PDEIVB | |
| PDE4DIP | Phosphodiesterase 4D interacting protein | RP4-791M13.2, CMYA2, MMGL | v |
| PDE5A | Phosphodiesterase 5A, cGMP-specific | CGB-PDE, CN5A, PDE5 | |
| PDE6D | Phosphodiesterase 6D, cGMP-specific, rod, beta | JBTS22, PDED | |
| PDE7A | Phosphodiesterase 7A | RP11-707M3.3, HCP1, PDE7 | |
| PDE7B | phosphodiesterase 7B | RP11-472E5.2, bA472E5.1 | |
| PDGFA | Platelet-derived growth factor alpha polypeptide | PDGF-A, PDGF1 | |

| | | | |
|--------|---|---|---|
| PDGFC | Platelet derived growth factor C | UNQ174/PRO200, FALLOTEIN, SCDGF | |
| PDGFD | Platelet derived growth factor D | MSTP036, IEGF, SCDGF-B, SCDGFB | |
| PDGFRA | Platelet-derived growth factor receptor, alpha | CD140A, PDGFR-2, PDGFR2, RHEPDGFRA | √ |
| PDGFRB | Platelet-derived growth factor receptor, beta | CD140B, IBGC4, IGF1, JTK12, PDGFR, PDGFR-1, PDGFR1 | √ |
| PDHA1 | Pyruvate dehydrogenase (lipoamide) alpha 1 | RP11-723P2.1, PDHA, PDHCE1A, PHE1A | |
| PDHA2 | Pyruvate dehydrogenase (lipoamide) alpha 2 | hCG_1643458, PDHAL | |
| PDHX | Pyruvate dehydrogenase complex, protein subunit X | DLDBP, E3BP, OPDX, PDX1, proX | |
| PDIA5 | Protein disulfide isomerase family A, member 5 | PDIR | |
| PDIA6 | Protein disulfide isomerase family A, member 6 | ERP5, P5, TXNDC7 | |
| PDIK1L | PDLIM1 interacting kinase 1 like | RP11-96L14.4, CLIK1L, STK35L2 | |
| PDK1 | Pyruvate dehydrogenase kinase, isozyme 1 | | |
| PDK4 | Pyruvate dehydrogenase kinase, isozyme 4 | | |
| PDLIM2 | PDZ and LIM domain 2 (mystique) | PP6345, MYSTIQUE, SLIM | |
| PDLIM5 | PDZ and LIM domain 5 | L9, ENH, ENH1, LIM | |
| PDP1 | Pyruvate dehydrogenase phosphatase catalytic subunit | PDH, PDP, PDPC, PPM2C | |
| PDPK1 | 5-phosphoinositide dependent protein kinase | PDK1, PDPK2, PRO0461 | |
| PDS5A | PDS5, regulator of cohesion maintenance, protein 5A | PIG54, SCC-112, SCC112 | |
| PDS5B | PDS5, regulator of cohesion maintenance, protein 5B | RP1-267P19.1, APRIN, AS3, CG008 | |
| PDSS2 | Prenyl (decarboxyl) diphosphate synthase, cytosolic | RP11-5919.3, C00H210, C0Q10D5, DLPT, DCA3919.3, PDSS1 | |
| PDXDC1 | Pyridoxal-dependent decarboxylase domain containing 1 | LP8165 | |
| PDXK | Pyridoxal (pyridoxine, vitamin B6) kinase | PRED79, C21orf124, C21orf97, HEL-S-1a, PKH, PNK | |
| PDZD11 | PDZ domain containing 11 | RP13-26D14.3, AIPP1, PDZK11, PISP | |
| PDZRN3 | PDZ domain containing ring finger 3 | LNK3, SEMACAP3 | |
| PEBP1 | Phosphatidylethanolamine binding protein 1 | HCNT, HCNT pp, HEL-210, HEL-S-34, FDI, FEDI, PEPB, PEPB1, PEPB2 | |
| PEF1 | Penta-EF-hand domain containing 1 | UNQ1845/PRO3573, ABP32A, PEF1 | |
| PEG10 | Paternally expressed 10 | EDR, HB-1, MEF3L, Mar2, Mart2, RGAG3 | |
| PEG3 | Paternally expressed 3 | hCG_1685807, PW1, ZKSCAN22, ZNF904, ZSCAN24 | |
| PELI1 | Pellino E3 ubiquitin protein ligase 1 | | |
| PELI3 | Pellino E3 ubiquitin protein ligase family member 3 | | |
| PER2 | Period circadian clock 2 | FASPS, FASPS1 | |
| PER3 | Period circadian clock 3 | RP3-467L1.3, GIG13 | |
| PER4 | Period circadian clock 3 pseudogene | | |
| PERP | PERP, TP53 apoptosis effector | RP3-470H19.1, KCF1, KNTCAP1, POFCT, THW, H146G110.1 | |

| | | | |
|---------|---|---|--|
| PEX1 | Peroxisomal biogenesis factor 1 | tcag7.1018, PBD1A, PBD1B, ZWS, ZWS1 | |
| PEX11A | Peroxisomal biogenesis factor 11 alpha | PEX11-ALPHA, PMP28, hsPEX11p | |
| PEX13 | Peroxisomal biogenesis factor 13 | NALD, PBD11A, PBD11B, ZWS | |
| PEX19 | Peroxisomal biogenesis factor 19 | ON3W-C1.ZZ, DTSZZZ3E, HIK33, PBD12A, PMP11, PMP11, PVEJA, PVEJB, PMP13, PMP13, PMP13, PMP13, ZWS2 | |
| PEX2 | Peroxisomal biogenesis factor 2 | | |
| PEX3 | Peroxisomal biogenesis factor 3 | RP1-20N2.3, PBD10A, TRG18 | |
| PEX5 | Peroxisomal biogenesis factor 5 | PBD2A, PBD2B, PTS1-BP, PTS1R, PXR1 | |
| PEX5L | Peroxisomal biogenesis factor 5-like | PEX5R, PEX5RP, PXR2, PXR2B, TRIP8b | |
| PEX7 | Peroxisomal biogenesis factor 7 | RP11-55K22.6, PBD9B, PTS2R, RCDP1, RD | |
| PF4V1 | Platelet factor 4 variant 1 | CXCL4L1, CXCL4V1, PF4-ALT, PF4A, SCYB4V1 | |
| PFAS | Phosphatidylinositol myo-inositol | FGAMS, FGAR-AT, FGARAT, PURL | |
| PFKFB2 | Phosphofructokinase/fructose-bisphosphatase 2 | RP11-164O23.2, PFK-2/FBPase-2 | |
| PFKFB3 | Phosphofructokinase/fructose-bisphosphatase 3 | RP11-298K24.3, IPFK2, PFK2 | |
| PFKFB4 | Phosphofructokinase/fructose-bisphosphatase 4 | | |
| PGAM1 | Phosphoglycerate mutase 1 (brain) | RP11-452K12.8, HEL-S-35, PGAM-B, PGAMA | |
| PGAM4 | Phosphoglycerate mutase family member 4 | PGAM-B, PGAM1, PGAM3, dJ1000K24.1 | |
| PGAP1 | Post-GPI attachment to proteins 1 | UNQ3024/PRO9822, Bst1, ISPD3024, MRT42, SPG67 | |
| PGAP3 | Post-GPI attachment to proteins 3 | UNQ340/PRO1100, AGLA340, CABZ, PFKLDT, PBL408, LGS16 | |
| PGBD1 | PiggyBac transposable element derived 1 | hucep-4, HUCEP-4, SCAND4, dJ874C20.4 | |
| PGM2 | Phosphoglucomutase 2 | MSTP006 | |
| PGM2L1 | Phosphoglucomutase 2-like 1 | BM32A | |
| PGPEP1 | Pyroglutamyl-peptidase I | PAP-I, PGP, PGP-I, PGPI, Pcp | |
| PGPEP1L | Pyroglutamyl-peptidase I-like | | |
| PGR | Progesterone receptor | NR3C3, PR | |
| PGRMC2 | Progesterone receptor membrane component 2 | DG6, PMBP | |
| PGS1 | Phosphatidylglycerophosphate synthase 1 | | |
| PHACTR1 | Phosphatase and actin regulator 1 | RP1-257A7.1, RPEL, RPEL1, dJ257A7.2 | |
| PHACTR2 | Phosphatase and actin regulator 2 | RP3-468K18.3, C6orf56 | |
| PHACTR4 | Phosphatase and actin regulator 4 | RP11-442N24__A.1, PPP1R124 | |
| PHC1 | Polyhomeotic homolog 1 (Drosophila) | EDR1, HPH1, MCPH11, RAE28 | |
| PHC3 | Polyhomeotic homolog 3 (Drosophila) | EDR3, HPH3 | |
| PHF10 | PHD finger protein 10 | RP11-160E12.5, BAF45A, XAP135 | |
| PHF11 | PHD finger protein 11 | RP11-160E12.5, AT1, BCAT, IGEL, IGELK, IGELK, NTF1, DEN24, NTFDEN24 | |

| | | | |
|---------|---|--|---|
| PHF14 | PHD finger protein 14 | | |
| PHF15 | | | |
| PHF17 | | | |
| PHF2 | PHD finger protein 2 | CENP-35, GRC5, JHDM1E | |
| PHF20 | PHD finger protein 20 | RP5-1121G12.1, C200H104, GLEA2, HCA58, NZL, TDRD20A, TZR | |
| PHF20L1 | PHD finger protein 20-like 1 | CGI-72, TDRD20B | |
| PHF3 | PHD finger protein 3 | RP1-22I17.3 | |
| PHF6 | PHD finger protein 6 | AC004383.6, BFLS, BORJ, CENP-31 | v |
| PHIP | PHD domain homologous domain interacting protein | RP11-173D14.2, BRWD2, DCAF14, WDR11, ndrp | |
| PHKA1 | Phosphorylase kinase, alpha 1 (muscle) | PHKA | |
| PHLDA1 | PHD domain homologous-like domain, family A | DT1P1B11, PHRIP, TDAG51 | |
| PHLDB2 | PHD domain homologous-like domain, family B, PHD domain and leucine rich repeat protein | LL5b, LL5beta | |
| PHLPP2 | PHD domain homologous-like domain, family C | PHLPP2 | |
| PHOX2B | Paired-like homeobox 2b | NBLST2, NBPhox, PMX2B | v |
| PHTF1 | Putative homeodomain transcription factor 1 | RP4-730K3.2, PHTF | |
| PHTF2 | Putative homeodomain transcription factor 2 | | |
| PHYHIPL | PHYH domain homologous-like domain | UNQ6309/PRO20934 | |
| PI4K2A | Phosphatidylinositol 4-kinase type 2 alpha | RP11-548K23.6, PI4KII, PIK42A | |
| PI4K2B | Phosphatidylinositol 4-kinase type 2 beta | PI4KIIB, PIK42B | |
| PIAS3 | Protein inhibitor of activated STAT, 3 | ZMIZ5 | |
| PIBF1 | Progesterone immunomodulatory binding factor 1 | RP11-505F3.1, C13orf24, CEP90, PIBF | |
| PICALM | Phosphatidylinositol binding clathrin assembly protein | CALM, CLTH, LAP | v |
| PID1 | Protein tyrosine phosphatase domain | HMFN2073, NYGGF4, P-CL11, PCL11 | |
| PIGA | Phosphatidylinositol glycan anchor | GPI3, MCAHS2, PIG-A, PNH1 | |
| PIGG | Phosphatidylinositol glycan anchor | UNQ1950/PRO4405, GPI7, LAS21, PRO4405, PLGS1020 | |
| PIGK | Phosphatidylinositol glycan anchor | RP4-564M11.1, GPI8 | |
| PIGW | Phosphatidylinositol glycan anchor | Gwt1 | |
| PIGX | Phosphatidylinositol glycan anchor | PIG-X | |
| PIGY | Phosphatidylinositol glycan anchor | PIG-Y | |
| PIK3AP1 | Phosphoinositide-3-kinase adaptor protein 1 | RP11-34E5.3, BCAP | |
| PIK3C2A | Phosphatidylinositol-3-phosphate 5-kinase, class C | CPK, PI3-K-C2(ALPHA), PI3-K-C2A | |
| PIK3C2G | Phosphatidylinositol-3-phosphate 5-kinase, class C | PI3K-C2-gamma, PI3K-C2GAMMA | |
| PIK3C3 | Phosphatidylinositol 3-kinase, catalytic subunit type 2 | VPS34, hVps34 | |

| | | | |
|----------|---|--|---|
| PIK3R1 | Phosphoinositide-3-kinase, regulatory | AGM7, GRB1, p85, p85-ALPHA | √ |
| PIK3R3 | Phosphoinositide-3-kinase, regulatory | RP4-533D7.2, p55, p55-GAMMA | |
| PIK3R5 | Phosphoinositide-3-kinase, regulatory | F730038I15Rik, FOAP-2, P101-PI3K, p101 | |
| PIN4 | Pinhead (peptidylprolyl cis/trans isomerase) | AL135749.5, EPVH, PAR14, PAR17 | |
| PINX1 | PIN2/1/3/4 interacting, telomerase | LPTL, LPTS | |
| PIP4K2A | Phosphatidylinositol-3-phosphate 4-kinase, class II | NP11-301N24.1, PIP4KA, PIP4K2A, PIP4KII-alpha, PIP4KIIA, PIP4K | |
| PIP4K2B | Phosphatidylinositol-3-phosphate 4-kinase, class II | PI5P4KB, PIP5K2B, PIP5KIIB, PIP5KIIbeta | |
| PIP4K2C | Phosphatidylinositol-3-phosphate 4-kinase, class II | PIP5K2C | |
| PIP5K1P1 | Phosphatidylinositol-4-phosphate 3-kinase, class I | | |
| PIRT | Phosphoinositide-interacting regulator of transient receptor potential channels | hCG_1776018 | |
| PITPNA | Phosphatidylinositol transfer protein, alpha | HEL-S-36, PI-TPalpha, PITPN, VIB1A | |
| PITPNB | Phosphatidylinositol transfer protein, beta | RP3-353E16.2, PI-TP-beta, PtdInsTP, VIB1B | |
| PITPNC1 | Phosphatidylinositol transfer protein, cytosolic 1 | IM-KDGB-beta, IMKDGBbeta, KDGB-BETA, KDGBD, PDCDD1 | |
| PIWIL1 | Piwi-like RNA-mediated gene silencing 1 | CT80.1, HIWI, MIWI, PIWI | |
| PJA1 | Praja ring finger 1, E3 ubiquitin protein ligase | RP13-55H22.1, PRAJA1, RNF70 | |
| PJA2 | Praja ring finger 2, E3 ubiquitin protein ligase | Neurodap1, RNF131 | |
| PKD1L2 | Polycystic kidney disease 1-like 2 | PC1L2 | |
| PKD2 | Polycystic kidney disease 2 (autosomal recessive) | APKD2, PC2, PKD4, Pc-2, TRPP2 | |
| PKDCC | Protein kinase domain containing, polycystic kidney and hepatic disease 1 | SGK493, Vik | |
| PKHD1 | Polycystic kidney and hepatic disease 1 (autosomal recessive) | ARPKD, FCYT, TIGM1 | |
| PKN2 | Protein kinase N2 | NP5-905H10.1, PAK2, PAK2, PAKK2, PAKK2L2, PAK2042, Pak-2, STK7 | |
| PKNOX1 | PBX/knotted 1 homeobox 1 | PREP1, pkonx1c | |
| PKNOX2 | PBX/knotted 1 homeobox 2 | PREP2 | |
| PKP2 | Plakophilin 2 | ARVD9 | |
| PKP4 | Plakophilin 4 | p0071 | |
| PLA2G12A | Phospholipase A2, group XIA | FKSG38, GXII, PLA2G12, ROSSY | |
| PLA2G2D | Phospholipase A2, group IID | UNQ768, PLA2IID, SPLASH, sPLA2-IID, sPLA2S | |
| PLA2G4A | Phospholipase A2, group IVA (cytosolic, calcium independent) | PLA2G4, cPLA2-alpha | |
| PLA2G4C | Phospholipase A2, group IV C (cytosolic, calcium independent) | CPLA2-gamma | |
| PLA2G5 | Phospholipase A2, group V | FRFB, GV-PLA2, PLA2-10, hVPLA(2) | |
| PLA2R1 | Phospholipase A2 receptor 1, 180 kDa | CLEC13C, PLA2-R, PLA2G1R, PLA2IR, PLA2R | |
| PLAC1L | | | |
| PLAC8 | Placenta-specific 8 | BM-004, C15, DGIC, onzin | |

| | | | |
|----------|--|---|---|
| PLAG1 | Pleiomorphic adenoma gene 1 | PSA, SGPA, ZNF912 | v |
| PLAU | Plasminogen activator, urokinase | RP11-417O11.1, ATF, BDPLT5, QPD, UPA, URK, u-PA | |
| PLBD2 | Phospholipase B domain containing 2 | P76 | |
| PLCB1 | Phospholipase C, beta 1 (phosphoinositide-specific) | RP4-034A7.1, ELETZ, PFPLC, PLC-134, PLC-1, PLC154A, PLCB1B, PLCB1 | |
| PLCB3 | Phospholipase C, beta 3 (cholesterol-specific) | | |
| PLCB4 | Phospholipase C, beta 4 | RP4-811H13.1, ARCND2, PI-PLC | |
| PLCD4 | Phospholipase C, delta 4 | | |
| PLCG1 | Phospholipase C, gamma 1 | RP3-511B24.2, NCKAP3, PLC-II, PLC1, PLC148, PLCgamma1 | |
| PLCH1 | Phospholipase C, eta 1 | PLCL3 | |
| PLCL1 | Phospholipase C-like 1 | PLCE, PLCL, PLDL1, PPP1R127, PRIP | |
| PLCL2 | Phospholipase C-like 2 | PLCE2 | |
| PLCXD3 | Phosphatidylinositol-specific phospholipase C | | |
| PLD1 | Phospholipase D1; phosphatidylinositol-specific | | |
| PLD5 | Phospholipase D family, member 5 | PLDC | |
| PLDN | | | |
| PLEK | Pleckstrin | P47 | |
| PLEKHA1 | Pleckstrin homology domain containing, family 1, member 1 | RP11-436O19__A.1, TAPP1 | |
| PLEKHA2 | Pleckstrin homology domain containing, family 1, member 2 | TAPP2 | |
| PLEKHA3 | Pleckstrin homology domain containing, family 1, member 3 | FAPP1 | |
| PLEKHA5 | Pleckstrin homology domain containing, family 1, member 5 | PEPP-2, PEPP2 | |
| PLEKHA6 | Pleckstrin homology domain containing, family 1, member 6 | RP11-203F10.4, PEPP-3, PEPP3 | |
| PLEKHA8 | Pleckstrin homology domain containing, family 1, member 8 | FAPP2 | |
| PLEKHB2 | Pleckstrin homology domain containing, family 2, member 2 | EVT2 | |
| PLEKHG2 | Pleckstrin homology domain containing, family 2, member 2 | ARHGEF42, CLG | |
| PLEKHG4B | Pleckstrin homology domain containing, family 2, member 4B | | |
| PLEKHH2 | Pleckstrin homology domain containing, family 2, member 2 | PLEKHH1L | |
| PLEKHJ1 | Pleckstrin homology domain containing, family 2, member 1 | GMRPX | |
| PLEKHM3 | Pleckstrin homology domain containing, family 2, member 3 | DAPR, PLEKHM1L | |
| PLGLA | Plasminogen-like A (pseudogene) | | |
| PLGLB1 | Plasminogen-like B1 | | |
| PLGLB2 | Plasminogen-like B2 | | |
| PLK1 | Polo-like kinase 1 | PLK, STPK13 | |
| PLP1 | Proteolipid protein 1 | CHC-098D2.1, GFMOC, HLD1, MIMPL, PL1, PL1/DM20, PML, SPC2 | |

| | | | |
|----------|--|---|---|
| PLRG1 | Pleiotropic regulator 1 | Cwc1, PRL1, PRP46, PRPF46, TANGO4 | |
| PLS1 | Plastin 1 | | |
| PLS3 | Plastin 3 | BMND18, T-plastin | |
| PLSCR2 | Phospholipid scramblase 2 | | |
| PLSCR5 | Phospholipid scramblase family, member 5 | | |
| PLVAP | Plasmalemma vesicle associated protein | | |
| PLXDC2 | Plexin domain containing 2 | | |
| PLXNA3 | Plexin A3 | AA-TW81057D9.5, U.S, HSSLAGENE, PLXNA3, PLXNA4, Vag7.1291, FATV2820, FLEXA4A, PLXNA4D, PRQ24002, PLXNA4 | |
| PLXNA4 | Plexin A4 | | |
| PM20D2 | Peptidase M20 domain containing 2 | ACY1L2, bA63L7.3 | |
| PMAIP1 | Protein-12-myristate-13-acetate-induced 1 | APR, NOXA | |
| PMCHL1 | Protein-12-myristate-13-acetate-induced 1 | | |
| PMCHL2 | Protein-12-myristate-13-acetate-induced 2 | | |
| PML | Promyelocytic leukemia | MYL, PP8675, RNF71, TRIM19 | √ |
| PMPCB | Peptidase (mitochondrial processing) beta | Beta-MPP, MPP11, MPPB, MPPP52, P-52 | |
| PMS1 | PMS1 postmeriotic segregation increased 1 | HNPCC3, PMSL1, hPMS1 | √ |
| PMS2L5 | PMS2L5 postmeriotic segregation increased 5 | | |
| PNLIPRP1 | Pancreatic lipase-related protein 1 | | |
| PNLIPRP3 | Pancreatic lipase-related protein 3 | | |
| PNMA1 | Paraneoplastic Ma antigen 1 | MA1 | |
| PNMA2 | Paraneoplastic Ma antigen 2 | MA2, MM2, RGAG2 | |
| PNMAL1 | Paraneoplastic Ma antigen family-like 1 | | |
| PNN | Pinin, desmosome associated protein | DRS, DRSP, SDK3, memA | |
| PNPLA1 | Protein-12-myristate-13-acetate-induced 1 | RP1-50J22.1, ARCI10, dJ50J22.1 | |
| PNPT1 | Polyribonucleotide nucleotidyltransferase 1 | COXPD13, DFNB70, OLD35, PNPASE, old-35 | |
| PNRC1 | Proline-rich nuclear receptor coactivator 1 | RP11-63L7.5, B4-2, PNAS-145, PROL2, PRR2 | |
| PNRC2 | Proline-rich nuclear receptor coactivator 2 | RP11-4M23.5 | |
| POC1B | POC1 centriolar protein B | PIX1, TUWD12, WDR51B | |
| PODXL | Podocalyxin-like | Gp200, PC, PCLP, PCLP-1 | |
| POFUT1 | Protein O-fucosyltransferase 1 | DDD2, FUT12, O-FUT, O-Fuc-T, O-FucT-1, OFUCT1 | |
| POGK | Pogo transposable element with KRAB | LST003, BASS2, KRBOX2 | |
| POLA1 | Polymerase (DNA-directed), alpha 1, | NSX, POLA, p180 | |
| POLDIP2 | Polymerase (DNA-directed), delta interacting protein 2 | HSPC017, PDIP38, POLD4, p38 | |

| | | | |
|-----------|---|--|---|
| POLH | Polymerase (DNA directed), eta | RP11-22I24.1, RAD30, RAD30A, XP-V, XPV | |
| POLI | Polymerase (DNA directed) iota | RAD30B, RAD30B | |
| POLK | Polymerase (DNA directed) kappa | DINB1, DINP, POLQ | |
| POLM | Polymerase (DNA directed), mu | Pol Mu, Tdt-N | |
| POLQ | Polymerase (DNA directed), theta | POLH, PRO0327 | |
| POLR2D | Polymerase (RNA) II (DNA directed) | HSRBP4, HSRPB4, RBP4, RPB16 | |
| POLR2K | Polymerase (RNA) II (DNA directed) | ADC10-alpha, KI ADC4, KI BT0alpha, KI BT2, KI BT3, LRRP7.0, LRRP10 | |
| POLR3B | Polymerase (RNA) III (DNA directed) | C128, HLD8, INMAP, RPC2 | |
| POLR3F | Polymerase (RNA) III (DNA directed) | RPC39, RPC6 | |
| POLR3G | Polymerase (RNA) III (DNA directed) | RPC32, RPC7 | |
| POLR3K | Polymerase (RNA) III (DNA directed) | My010, C11, C11-RNP3, RPC10, RPC11, RPC12.5 | |
| POM121 | POM121 transmembrane nucleoporin | P145A, POM121 | |
| POM121C | POM121 transmembrane nucleoporin C | POM121-2 | |
| POM121L8P | POM121 transmembrane nucleoporin-like 8 | | |
| POM121L9P | POM121 transmembrane nucleoporin-like 9, pseudogene | | |
| POMC | Proopiomelanocortin | ACTH, CLIP, LPH, MSH, NPP, POC | |
| POMGNT1 | Protein O-linked mannosyl transferase 1 | KFT1-322N21.5, GNT1.2, GNT1.2, LGMD20, MED, MGAT1.2, MGAT1.3 | |
| POP1 | Processing of precursor 1, ribonuclease | | |
| POP4 | Processing of precursor 4, ribonuclease | RPP29 | |
| POSTN | Periostin, osteoblast specific factor | RP11-412K4.1, OSF-2, OSF2, PDLPOSTN, PN, periostin | |
| POTEA | POTE ankyrin domain family, member A | A26A1, CT104.3, POTE-8, POTE8 | |
| POTEC | POTE ankyrin domain family, member C | A26B2, CT104.6, POTE-18, POTE18 | |
| POTEG | POTE ankyrin domain family, member G | A20C2, ACTB1, CT104.4, POTE-14, POTE14, POTE14-like, POTE22 | |
| POU2F2 | POU class 2 homeobox 2 | OCT2, OTF2, Oct-2 | |
| POU3F2 | POU class 3 homeobox 2 | BRN2, N-Oct3, OCT7, OTF7, OTF7, POU3, bin-2, Oct-7 | |
| POU4F2 | POU class 4 homeobox 2 | BRN3.2, BRN3B, Brn-3b | |
| PPA1 | Pyrophosphatase (inorganic) 1 | RP11-367H5.1, HEL-S-66p, IOPPP, PP, PP1, SID6-8061 | |
| PPAP2A | Phosphatidic acid phosphatase type 2A | LLP1a, LPP1, PAP-2a, PAP2 | |
| PPAP2B | Phosphatidic acid phosphatase type 2B | Dri42, LPP3, PAP2B, VCIP | |
| PPAPDC1A | Phosphatidic acid phosphatase type 2 | RP11-257O17.1, DPPL2, PPAPDC1 | |
| PPARA | Peroxisome proliferator-activated receptor | SC22CB-5E3.5, NR1C1, PPAR, PPARalpha, hPPAR | |
| PPARG | Peroxisome proliferator-activated receptor | CIMT1, GEM1, NR1C3, PARG2, PARGgamma, PPARC | v |
| PPARGC1A | Peroxisome proliferator-activated receptor | LEM6, PGC-1(alpha), PGC-1v, PGC1, PGC1A, PPARGC1 | |

| | | | |
|----------|--|--|--|
| PPAT | Phosphatidyl pyrophosphatase | ATASE, GPAT, PRAT | |
| PPCS | Phosphopantothenoylcysteine synthetase | RP11-163G10.1 | |
| PPFIA1 | Protein tyrosine phosphatase, receptor type, 1 | LIP.1, LIP1, LIPRIN | |
| PPFIA3 | Protein tyrosine phosphatase, receptor type, 1 | LPNA3 | |
| PPFIA4 | Protein tyrosine phosphatase, receptor type, 1 | | |
| PPFIBP1 | Protein tyrosine phosphatase interacting protein, 1 (Lisitin beta 1) | L2, SGT2, hSGT2, hSgt2p | |
| PPHLN1 | Periplakin 1 | HSPC206, HSPC232 | |
| PPIL1 | Peptidylprolyl isomerase (cyclophilin)-like 1 | CGI-124, CYPL1, PPIase, hCyPX | |
| PPIL5 | | | |
| PPIL6 | Peptidylprolyl isomerase (cyclophilin)-like 6 | NP11-425D10.0, PPIase, KSH112, OA425D10.0, H010E10.1 | |
| PPP5K2 | Diphosphoinositol pentakisphosphate kinase 2 | HISPPD1, IP7K2, VIP2 | |
| PPL | Periplakin | | |
| PPM1A | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, | PP2C-ALPHA, PP2CA, PP2Calpha | |
| PPM1B | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, | PP2C-beta, PP2C-beta-A, PP2CB, PP2CBETA, PPC2BETA-X | |
| PPM1D | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, | PP2C-DELTA, WIP1 | |
| PPM1E | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, | CaMKP-N, POPX1, PP2CH, caMKN | |
| PPM1K | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, | BDP, MSUDMV, PP2CKappa, PP2CK, P1MI, UG0892E07 | |
| PPM1L | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, | PP2C-epsilon, PP2CE, PPM1-LIKE | |
| PPP1CB | Protein phosphatase 1, catalytic subunit, beta | HEL-S-80p, PP-1B, PP1B, PP1beta, PPP1CD | |
| PPP1R12B | Protein phosphatase 1, regulatory subunit 12B | MYPT2, PP1bp55 | |
| PPP1R12C | Protein phosphatase 1, regulatory subunit 12C | LENG3, MBS85, p84, p85 | |
| PPP1R13B | Protein phosphatase 1, regulatory subunit 13B | ASPP1, p53BP2-like, p85 | |
| PPP1R14C | Protein phosphatase 1, regulatory (inhibitor) subunit 14C | CPI17-like, KEPI, NY-BR-81 | |
| PPP1R1C | Protein phosphatase 1, regulatory (inhibitor) subunit 1C | IPP5 | |
| PPP1R2 | Protein phosphatase 1, regulatory (inhibitor) subunit 2 | IPP-2, IPP2 | |
| PPP1R2P3 | Protein phosphatase 1, regulatory (inhibitor) subunit 2 pseudogene 3 | | |
| PPP1R3B | Protein phosphatase 1, regulatory subunit 3B | GL, PPP1R4, PTG | |
| PPP1R3C | Protein phosphatase 1, regulatory subunit 3C | PPP1R5 | |
| PPP1R3D | Protein phosphatase 1, regulatory subunit 3D | PPP1R6 | |
| PPP1R8 | Protein phosphatase 1, regulatory subunit 8 | RP4-547C9.1, ARD-1, ARD1, NIPP-1, NIPP1, PRO2047 | |
| PPP1R9A | Protein phosphatase 1, regulatory subunit 9A | NRB1, NRBI, Neurabin-1 | |
| PPP2R1B | Protein phosphatase 2, regulatory subunit A, | PP2A-Abeta, PR65B | |
| PPP2R2C | Protein phosphatase 2, regulatory subunit D, | B55-GAMMA, IMYPNO, IMYPNO1, PR52, PR55G | |

| | | | |
|----------|--|--|---|
| PPP2R3A | Protein phosphatase 2, regulatory subunit B, alpha | PPP2R3, PR130, PR72 | |
| PPP2R3C | Protein phosphatase 2, regulatory subunit B, gamma | C14orf10, G4-1, G5pr | |
| PPP2R5A | Protein phosphatase 2, regulatory subunit B, delta | B56A, PR61A | |
| PPP2R5C | Protein phosphatase 2, regulatory subunit B, epsilon | B56G, PR61G | |
| PPP2R5E | Protein phosphatase 2, regulatory subunit B, zeta | | |
| PPP3CB | Protein phosphatase 3, catalytic subunit, beta | RP11-345K20.1, CALNA2, CALNB, CNA2, PP2Bbeta | |
| PPP3R1 | Protein phosphatase 3, regulatory subunit B, alpha | CALNB1, CNB, CNB1 | |
| PPP4C | Protein phosphatase 4, catalytic subunit | PP4, PP4C, PPH3, PPP4, PPX | |
| PPP4R1 | Protein phosphatase 4, regulatory subunit 1 | MEG1, PP4(Rmeg), PP4R1 | |
| PPP4R4 | Protein phosphatase 4, regulatory subunit 4 | CFAP14, KIAA1622, PP4R4 | |
| PPP6C | Protein phosphatase 6, catalytic subunit | RP11-366O20.1, PP6, PP6C | |
| PPPDE1 | | | |
| PQLC1 | PQ loop repeat containing 1 | | |
| PRAMEF11 | PRAME family member 11 | | |
| PRAMEF13 | PRAME family member 14 | RP11-584P2.2, PRAMEF13 | |
| PRAMEF14 | PRAME family member 14 | RP11-584P2.2, PRAMEF13 | |
| PRAMEF4 | PRAME family member 4 | RP5-845O24.6 | |
| PRAMEF5 | PRAME family member 5 | PRAMEF23L, PRAMEF5 | |
| PRAMEF6 | PRAME family member 6 | | |
| PRAMEF9 | PRAME family member 9 | | |
| PRC1 | Protein regulator of cytokinesis 1 | ASE1 | |
| PRCD | Progressive rod-cone degeneration | RP36 | |
| PRCP | Prolylcarboxypeptidase (angiotensinase C) | HUMPCP, PCP | |
| PRDM1 | PR domain containing 1, with ZNF domain | RP1-134E15.1, BLIMP1, PRDI-BF1 | v |
| PRDM10 | PR domain containing 10 | PFM7 | |
| PRDM15 | PR domain containing 15 | C21orf83, PFM15, ZNF298 | |
| PRDM2 | PR domain containing 2, with ZNF domain | KIF5-1177E19.1, HUMH10A11, KMT6, MTD-Z1, KIZ, RIZ1, RIZ2 | |
| PRDM4 | PR domain containing 4 | PFM1 | |
| PRDM6 | PR domain containing 6 | | |
| PRDM8 | PR domain containing 8 | PFM5 | |
| PRDX3 | Peroxiredoxin 3 | AOI-1, AOI1, HBC189, MLK3, PRO1748, SF-22, PIA-III | |
| PRDX5 | Peroxiredoxin 5 | SBDB10, ACK1, AOED100, BT00, HELL-S-55, FLI1, PMP20, PRDX6, PRDXV, PRDXV.1 | |
| PRELID2 | PRELI domain containing 2 | | |

| | | | |
|----------|--|--|--|
| PREPL | Prolyl endopeptidase-like | | |
| PREX2 | Phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 2 | 6230420N16Rik, DEP.2, DEPDC2, P-REX2, PPP1R129 | |
| PRG1 | P53-responsive gene 1 | | |
| PRH2 | Proline-rich protein HaeIII subfamily 2 | PIF-S, PRH1, PRP-1/PRP-2, Pr, db-s, pa, pr1/Pr2 | |
| PRICKLE2 | Prickle homolog 2 (Drosophila) | EPM5 | |
| PRIMA1 | Proline rich membrane anchor 1 | PRIMA | |
| PRINS | | | |
| PRKAA2 | Protein kinase, AMP-activated, alpha 2 | AMPK, AMPK2, AMPKa2, PRKAA | |
| PRKAB1 | Protein kinase, AMP-activated, beta 1 non-catalytic subunit | AMPK, HAMPKb | |
| PRKAB2 | Protein kinase, AMP-activated, beta 2 non-catalytic subunit | | |
| PRKACB | Protein kinase, cAMP-dependent, catalytic, type II, beta | RP11-82H13.1, PKA C-beta, PKACB | |
| PRKAG2 | Protein kinase, AMP-activated, gamma 2 non-catalytic subunit | AAKG, AAKG2, CMH6, H91620p, WPWS | |
| PRKAG3 | Protein kinase, AMP-activated, gamma 3 non-catalytic subunit | AMPKG3 | |
| PRKAR2B | Protein kinase, cAMP-dependent, regulatory, type II, beta | PRKAR2, RII-BETA | |
| PRKCA | Protein kinase C, alpha | AAG6, PKC-alpha, PKCA, PRKACA | |
| PRKCB | Protein kinase C, beta | PKC-beta, PKCB1, PRKCB2, PRKCB | |
| PRKCD | Protein kinase C, delta | CVID9, MAY1, PKCD, nPKC-delta | |
| PRKCDBP | Protein kinase C, delta binding protein | CAVIN3, HSRBC, SRBC, cavin-3 | |
| PRKCE | Protein kinase C, epsilon | PKCE, nPKC-epsilon | |
| PRKCI | Protein kinase C, iota | DXS1179E, PKCI, nPKC-iota | |
| PRKD1 | Protein kinase D1 | PKC-MU, PKCM, PKD, PRKCM | |
| PRKD2 | Protein kinase D2 | HSPC187, PKD2, nPKC-D2 | |
| PRKD3 | Protein kinase D3 | EPK2, PKC-NU, PKD3, PRKCN, nPKC-NU | |
| PRKG1 | Protein kinase, cGMP-dependent, type I | RP11-340D6.1, 1, AAT6, PRKB, PRKGR1B, CGK, CGK1, CGK1L, CGK1BETA, CGK1delta, PRKCI | |
| PRKRIP1 | PRKR interacting protein 1 (IL11 inducible) | C114, KRBOX3 | |
| PRKX | Protein kinase, X-linked | PKX1 | |
| PRKY | Protein kinase, Y-linked, pseudogene | PRKXP3P, PRKY | |
| PRLR | Prolactin receptor | HPRL, MFAB, hPRLrI | |
| PRM1 | Protamine 1 | CT94.1, P1 | |
| PRMT1 | Protein arginine methyltransferase 1 | ANM1, HCP1, HRMT1L2, IR1B4 | |
| PRMT2 | Protein arginine methyltransferase 2 | HRMT1L1 | |
| PRMT3 | Protein arginine methyltransferase 3 | HRMT1L3 | |
| PRMT8 | Protein arginine methyltransferase 8 | HRMT1L3, HRMT1L4 | |

| | | | |
|---------|---|--|--|
| PRND | Prion protein 2 (dublet) | UNQ1850/PRO5443, DDFEL, DFL, FFLF, H106916.4 | |
| PRO0611 | PRO0611 protein | | |
| PRO0628 | uncharacterized LOC29053 | | |
| PRO1768 | FOXN3 antisense RNA 2 | PRO1768 | |
| PROCR | protein C receptor, endothelial | CCCA, CCD41, EPCR | |
| PRODH | proline dehydrogenase (oxidase) 1 | HSPOX2, PIG6, POX1, PRODH2, TP53I6, PRODH | |
| PROM2 | prominin 2 | UNQ2521/PRO6014, PROML2 | |
| PROX1 | prospero homeobox 1 | | |
| PRPF18 | pre-mRNA processing factor 18 | RP11-295P9.7, PRP18, hPrp18 | |
| PRPF3 | pre-mRNA processing factor 3 | HPRP3, HPRP3P, PRP3, Prp3p, RP18, SNRNP90 | |
| PRPF39 | pre-mRNA processing factor 39 | | |
| PRPF40A | PRPF40 pre-mRNA processing factor 40 homolog A (<i>S. cerevisiae</i>) | HSPC223, FBF11, FBF11, FLAF1, FNF13, HNF10, IIP3-1013A0.2, IPRF1, IPRF4, IPRF11, IPRF4K, U013A.1A1 | |
| PRPF4B | pre-mRNA processing factor 4B | AUMD, AVMD, CAUDZ, DS, FNF11, KDS, K17, TSPAN2, U013A.1B | |
| PRPH2 | peripherin 2 (retinal degeneration, slow) | | |
| PRPS2 | phosphoribosyl pyrophosphate synthetase 2 | PRSII | |
| PRR13 | proline rich 13 | BM-041, TXR1 | |
| PRR20A | proline rich 20A | PRR20 | |
| PRR5 | proline rich 5 (renal) | K11-181C9.3, FLJ20183K, P1010, PROTOR-1, PROTOR1 | |
| PRR5L | proline rich 5 like | PROTOR2 | |
| PRRC1 | proline-rich coiled-coil 1 | | |
| PRRG1 | proline rich Gla (G-carboxyglutamic acid) 1 | PRGP1 | |
| PRRG3 | proline rich Gla (G-carboxyglutamic acid) 3 (mammary) | PRGP3, TMG3 | |
| PRSS16 | protease, serine, 16 (thymus) | XXbac-BPG24O18.5, TSSP | |
| PRSS36 | Protease, serine, 36 | | |
| PRSS37 | Protease, serine, 37 | TRYX2 | |
| PRSS55 | protease, serine, 55 | UNQ9391/PRO34284, CT153, T-SP1, TSP1, UNQ9391 | |
| PRSSL1 | | | |
| PRTG | Protogenin | IGDCC5 | |
| PRUNE | Prune exopolyphosphatase | RP11-316M1.6, DRES-17, DRES17, HTCD37 | |
| PRUNE2 | Prune homolog 2 (Drosophila) | K11-214N10.3, A214N10.3, DMCC1, DMFAL, G0365, KIAA0267, LA214N16.2 | |
| PSAP | Prosaposin | GLBA, SAPI | |
| PSAPL1 | Prosaposin-like 1 (gene/pseudogene) | | |
| PSAT1 | Phosphoserine aminotransferase 1 | EPIP, PSA, PSAT | |

| | | | |
|-----------|---|---|---|
| PSD3 | Pleckstrin and Sec7 domain containing 3 | EFA6R, HCA67 | |
| PSEN1 | Presenilin 1 | AD3, FAD, PS-1, PS1, S182 | |
| PSG11 | Pregnancy specific beta-1-glycoprotein 11 | PSBG-11, PSBG-13, PSG13, PSG14 | |
| PSG2 | Pregnancy specific beta-1-glycoprotein 2 | CEA, PSBG2, PSG1 | |
| PSG3 | Pregnancy specific beta-1-glycoprotein 3 | | |
| PSG5 | Pregnancy specific beta-1-glycoprotein 5 | FL-NCA-3, PSG | |
| PSG6 | Pregnancy specific beta-1-glycoprotein 6 | PSBG-10, PSBG-12, PSBG-6, PSG10, PSGGB | |
| PSG9 | Pregnancy specific beta-1-glycoprotein 9 | PS34; PSG11; PSGII; PSBG-9; PSBG-11 | |
| PSIP1 | PC4 and SFRS1 interacting protein 1 | DFS70, LEDGF, PAIP, PSIP2, p52, p75 | √ |
| psiTPTE22 | | | |
| PSKH1 | Protein serine kinase H1 | | |
| PSMA8 | Proteasome (prosome, macropain) subunit, alpha 8 | PSMA7L | |
| PSMB2 | Proteasome (prosome, macropain) subunit, beta 2 | RP5-983H21.1, HC7-I | |
| PSMB4 | Proteasome (prosome, macropain) subunit, beta 4 | HN3, HsN3, PROS-26, PROS26 | |
| PSMC6 | Proteasome (prosome, macropain) subunit, alpha 6 | DELTA, LMPY, Y | |
| PSMD10 | Proteasome (prosome, macropain) zeta 10 | RP5-889N15.3, dJ889N15.2, p28, p28(GANK) | |
| PSMD13 | Proteasome (prosome, macropain) zeta 13 | HSPC027, Rpn9, S11, p40.5 | |
| PSMD5 | Proteasome (prosome, macropain) zeta 5 | RP11-271I.5, S5B | |
| PSMD8 | Proteasome (prosome, macropain) zeta 8 | HEL-S-91n, HIP6, HYPF, Nin1p, Rpn12, S14, p31 | |
| PSME4 | Proteasome (prosome, macropain) activator 4 | PA200 | |
| PSMF1 | Proteasome (prosome, macropain) inhibitor 1 | RP4-545L17.1, PI31 | |
| PSMG2 | Proteasome (prosome, macropain) assembly chaperone 2 | CLAST15, HCCA3, HST11707, MDS005, PAC2, TME85ID1 | |
| PSMG3 | Proteasome (prosome, macropain) assembly chaperone 3 | C7orf48, PAC3 | |
| PSORS1C1 | Psoriasis susceptibility 1 candidate 1 | DADB-141O4.2, C6orf16, SEEK1 | |
| PSPC1 | Paraspeckle component 1 | RP11-523H24.2, PSP1 | |
| PSRC1 | Proline/serine-rich coiled-coil 1 | RP11-297O4.2, DDA3, FP3214 | |
| PSTPIP1 | Proline-serine-threonine phosphatase interacting protein 1 | CD2BP1, CD2BP1L, CD2BP1S, H-PIP, PAPAS, PSTPIP | |
| PTAFR | Platelet-activating factor receptor | PAFR | |
| PTAR1 | Protein prenyltransferase alpha subunit repeat containing 1 | RP11-109D9.2 | |
| PTBP2 | Polypyrimidine tract binding protein 2 | PTBLP, brPTB, nPTB | |
| PTCD3 | Pentatricopeptide repeat domain 3 | TRG15, MRP-S39 | |
| PTCH1 | Patched 1 | KPT1-455O5.3, BCNS, HPE7, INCCS, TTC, TTC1, PTCH1, PTCH1L | |
| PTEN | Phosphatase and tensin homolog | PTQ23del, BZS, CWS1, DEC, GLM2, MIAMI, MMAC11, TER1, PTEN | √ |

| | | | |
|---------|---|---|---|
| PTGER3 | Prostaglandin E receptor 3 (subtype EP3) | RP5-952N6.2, EP3, EP3-I, EP3-II, EP3-III, EP3-IV, EP3E, PGE2R | |
| PTGER4 | Prostaglandin E receptor 4 (subtype EP4) | EP4, EP4R | |
| PTGES3 | Prostaglandin E synthase 3 (cytosolic) | P23, TEBP, cPGES | |
| PTGFR | Prostaglandin F receptor (FP) | RP5-944H6.1, FP | |
| PTGFRN | Prostaglandin F2 receptor inhibitor | CD315, CD9P-1, EWI-F, FPRP, SMAP-6 | |
| PTGIS | Prostaglandin I2 (prostacyclin) synthase | CYP8, CYP8A1, PGIS, PTGI | |
| PTGR2 | Prostaglandin reductase 2 | HEL-S-298, PGR2, ZADH1 | |
| PTGS1 | Prostaglandin-endoperoxide synthase 1 | RP11-542K25.0, COX1, COX3, PCO1, PLS-1, | |
| PTGS2 | Prostaglandin-G/H synthase 2 (cyclooxygenase 2) | COX-2, COX2, CYP2C8, CYP2C9, CYP2C10, CYP2C11, CYP2C12, CYP2C13, CYP2C14, CYP2C15, CYP2C16, CYP2C17, CYP2C18, CYP2C19, CYP2C20, CYP2C21, CYP2C22, CYP2C23, CYP2C24, CYP2C25, CYP2C26, CYP2C27, CYP2C28, CYP2C29, CYP2C30, CYP2C31, CYP2C32, CYP2C33, CYP2C34, CYP2C35, CYP2C36, CYP2C37, CYP2C38, CYP2C39, CYP2C40, CYP2C41, CYP2C42, CYP2C43, CYP2C44, CYP2C45, CYP2C46, CYP2C47, CYP2C48, CYP2C49, CYP2C50, CYP2C51, CYP2C52, CYP2C53, CYP2C54, CYP2C55, CYP2C56, CYP2C57, CYP2C58, CYP2C59, CYP2C60, CYP2C61, CYP2C62, CYP2C63, CYP2C64, CYP2C65, CYP2C66, CYP2C67, CYP2C68, CYP2C69, CYP2C70, CYP2C71, CYP2C72, CYP2C73, CYP2C74, CYP2C75, CYP2C76, CYP2C77, CYP2C78, CYP2C79, CYP2C80, CYP2C81, CYP2C82, CYP2C83, CYP2C84, CYP2C85, CYP2C86, CYP2C87, CYP2C88, CYP2C89, CYP2C90, CYP2C91, CYP2C92, CYP2C93, CYP2C94, CYP2C95, CYP2C96, CYP2C97, CYP2C98, CYP2C99, CYP2C100 | |
| PTH LH | Parathyroid hormone-like hormone | BDE2, HHM, PLP, PTHR, PTHRP | |
| PTK2B | Protein tyrosine kinase 2 beta | CADTK, CAKB, FADK2, FAK2, FRK, FTK, FTK2, PAFFK | |
| PTPDC1 | Protein tyrosine phosphatase domain | RP11-490F3.2, PTP9Q22 | |
| PTPLAD1 | Protein tyrosine phosphatase-like A domain | B-IND1, BIND1, HACD3, HSPC121 | |
| PTPN2 | Protein tyrosine phosphatase, non-receptor | PTN2, PTPT, TC-PTP, TCELLPTP, TCPTP | |
| PTPN22 | Protein tyrosine phosphatase, non-receptor | LYP, LYP1, LYP2, PEP, PTPN8 | |
| PTPN3 | Protein tyrosine phosphatase, non-receptor | RP11-18A3.3, PTP-H1, PTPH1 | |
| PTPN5 | Protein tyrosine phosphatase, non-receptor type 5 | PTPSTEP, STEP | |
| PTPN9 | Protein tyrosine phosphatase, non-receptor | MEG2, PTPMEG2 | |
| PTPRB | Protein tyrosine phosphatase, receptor type, B | HPTP-BETA, HPTPB, PTPB, R-PTP-BETA, VEPTP | |
| PTPRC | Protein tyrosine phosphatase, receptor type, C | RP11-555K8.4, BZ20, CD43, CD43R, GP160, L-CA, LCA, LY5, T300 | v |
| PTPRD | Protein tyrosine phosphatase, receptor type, D | HPTP, HTPD, HTPDELTA, PTPD, RPTPDELTA | |
| PTPRE | Protein tyrosine phosphatase, receptor type, E | RP11-380J17.1, HPTPE, PTPE, R-PTP-EPSILON | |
| PTPRJ | Protein tyrosine phosphatase, receptor type, J | CD148, DEP1, HPTPeta, R-PTP-ETA, SCC1 | |
| PTPRN2 | Protein tyrosine phosphatase, receptor type, N2 | IA-2beta, IAR, ICAAR, PTPRP, R-PTP-N2 | |
| PTPRO | Protein tyrosine phosphatase, receptor type, O | GLEET1, NTH50, PTP-OC, PTP-U21, PTP-U2, R-PTP-O, PTPRO | |
| PTPRR | Protein tyrosine phosphatase, receptor type, P | EC-PTP, PCPTP1, PTP-SL, PTPBR7, PTPRQ | |
| PTPRT | Protein tyrosine phosphatase, receptor type, T | RP5-1121H13.2, RPTPrho | |
| PTX3 | Pentraxin 3, long | TNFAIP5, TSG-14 | |
| PUM1 | Pumilio RNA-binding family member 1 | RP1-65J11.4, HSPUM, PUMH, PUMH1, PUML1 | |
| PURB | Purine-rich element binding protein B | PURBETA | |
| PURG | Purine-rich element binding protein G | PURG-A-B, PURG | |
| PUS10 | Pseudouridylate synthase 10 | CCDC139, DOBI | |
| PVR | Poliovirus receptor | CD155, HVED, NECL5, Necl-5, PVS, TAGE4 | |

| | | | |
|-----------|--|--|--|
| PVRL4 | Poliovirus receptor-related 4 | EDSS1, LNIR, PRR4, nectin-4 | |
| PVT1 | Pvt1 oncogene (non-protein coding) | LINC00079, NCRNA00079 | |
| PWP2 | Pwp2 periodic tryptophan protein homolog (mouse) | EHOC-17H, UTP1, PWP2 | |
| PWWP2A | PWWP domain containing 2A | MST101 | |
| PXDN | Peroxidasin homolog (Drosophila) | COPOA, D2S448, D2S448E, MG50, PRG2, PXN, VPO | |
| PXMP2 | Peroxisomal membrane protein 2, 22 kDa | PMP22 | |
| PXT1 | Peroxisomal, testis specific 1 | STEPP | |
| PYGB | Phosphorylase, glycogen; brain | RP5-965G21.1, GPBB | |
| QDPR | Quinoid dihydropteridine reductase | DHPR, PKU2, SDR33C1 | |
| QKI | QKI, KH domain containing, RNA binding | Hqk, QK, QK1, QK3, hqkI | |
| QRSL1 | Glutaminyl-tRNA synthetase (glutamic-tyrosyl) like 1 | GatA | |
| QSER1 | Glutamine and serine rich 1 | | |
| QSOX2 | Quiescin Q6 sulfhydryl oxidase 2 | RP11-83N9.4, QSCN6L1, SOXN | |
| QTRTD1 | Queuine tRNA-ribosyltransferase domain containing 1 | | |
| RAB10 | RAB10, member RAS oncogene family | | |
| RAB11A | RAB11A, member RAS oncogene family | YL8 | |
| RAB11FIP1 | RAB11 family interacting protein 1 (class I) | NOEL1A, RCP, rab11-FIP1 | |
| RAB11FIP2 | RAB11 family interacting protein 2 (class I) | Rab11-FIP2, nRip11 | |
| RAB11FIP5 | RAB11 family interacting protein 5 (class I) | GAF1, RIP11, pp75 | |
| RAB12 | RAB12, member RAS oncogene family | | |
| RAB13 | RAB13, member RAS oncogene family | GIG4 | |
| RAB14 | RAB14, member RAS oncogene family | RP11-165P4.4, FBP, RAB-14 | |
| RAB15 | RAB15, member RAS oncogene family | | |
| RAB18 | RAB18, member RAS oncogene family | RP11-148B2.1LI1, WARBM3, RAB18 | |
| RAB1A | RAB1A, member RAS oncogene family | RAB1, YPT1 | |
| RAB1B | RAB1B, member RAS oncogene family | | |
| RAB20 | RAB20, member RAS oncogene family | | |
| RAB21 | RAB21, member RAS oncogene family | | |
| RAB22A | RAB22A, member RAS oncogene family | | |
| RAB23 | RAB23, member RAS oncogene family | RP3-496N17.3, HSPC137 | |
| RAB2B | RAB2B, member RAS oncogene family | | |
| RAB33B | RAB33B, member RAS oncogene family | SMC2 | |
| RAB37 | RAB37, member RAS oncogene family | | |

| | | | |
|----------|---|--|---|
| RAB38 | RAB38, member RAS oncogene family | NY-MEL-1, rrGTPbp | |
| RAB39 | RAB39A, member RAS oncogene family | RAB39 | |
| RAB39B | RAB39B, member RAS oncogene family | RP13-228J13.2, MRX72 | |
| RAB3GAP1 | RAB3 GTPase activating protein subunit 1 | P130, RAB3GAP30, WARBM1, RAB3GAP1 | |
| RAB3GAP2 | RAB3 GTPase activating protein subunit 2 (non-catalytic) | RP11-308G11.1, RAB3-GAP130, RAB3GAP130, SPC60, WARBM2, p150 | |
| RAB3IL1 | RAB3A interacting protein (rabin3)-like 1 | GRAB | |
| RAB3IP | RAB3A interacting protein | RABIN3 | |
| RAB40A | RAB40A, member RAS oncogene family | | |
| RAB40AL | RAB40A, member RAS oncogene family- like | LL0XNC01-237H1.1, MRXSMP, RAR2, RLGP | |
| RAB40B | RAB40B, member RAS oncogene family | RAR, SEC4L | |
| RAB44 | RAB44, member RAS oncogene family | RP3-431A14.3, RASD3, RASL13, dJ431A14.3 | |
| RAB4A | RAB4A, member RAS oncogene family | HRES-1, HRES-1/RAB4, HRES1, RAB4 | |
| RAB5A | RAB5A, member RAS oncogene family | RAB5 | |
| RAB6A | RAB6A, member RAS oncogene family | RAB6 | |
| RAB7L1 | | | |
| RAB8B | RAB8B, member RAS oncogene family | | |
| RABEP1 | Rabaptin, RAB GTPase binding effector protein 1 | RAB5EP, RABPT5 | |
| RABGAP1 | RAB GTPase activating protein 1 | HSPC094, GAPCENA, TBC1D11 | |
| RABGEF1 | RAB guanine nucleotide exchange factor (GEF) 1 | RABEX5, RAP1, rabex-5 | |
| RABGGTB | Rab geranylgeranyltransferase, beta subunit | RP4-682C21.3, GGTB | |
| RABL3 | RAB, member of RAS oncogene family-like 2 | | |
| RABL5 | | | |
| RAC1 | Ras-related C3 botulinum toxin substrate 1 (rho family, small GTP-binding protein) | MIG5, Rac-1, TC-25, p21-Rac1 | v |
| RACGAP1 | Rac GTPase activating protein | CYK4, HsCYK-4, ID-GAP, MgcRacGAP | |
| RAD1 | RAD1 checkpoint DNA exonuclease | HRAD1, REC1 | |
| RAD17 | RAD17 homolog (<i>S. pombe</i>) | CCYC, HRAD17, R24LSP, RAD24, RAD17 | |
| RAD18 | RAD18 E3 ubiquitin protein ligase | RNF73 | |
| RAD21 | RAD21 homolog (<i>S. pombe</i>) | CDLS4, HR21, HRAD21, MCD1, NXP1, SCC1, hHR21 | v |
| RAD23B | RAD23 homolog B (<i>S. cerevisiae</i>) | RP11-131A5.1, HHR23B, HR23B, P58 | |
| RAD50 | RAD50 homolog (<i>S. cerevisiae</i>) | NBSLD2, hRad50, RAD50 | |
| RAD51AP1 | RAD51 associated protein 1 | PIR51 | |
| RAD51C | RAD51 paralog C | BROVCA3, FANCO, R51H3, RAD51L2 | |
| RAD54B | RAD54 homolog B (<i>S. cerevisiae</i>) | hCG_2009220, RDH54 | |

| | | | |
|----------|---|---|---|
| RADIL | Ras association and DIL domains | RASIP2 | |
| RAET1E | Retinoic acid early transcript 1E | U1NQ18077, FK04303, LETA1, INZDLF4, INK02DLF2, KLF4, IL1BP4, LA250I20.7, RAET1E | |
| RAG1 | Recombination activating gene 1 | RAG-1, RNF74 | |
| RAI1 | Retinoic acid induced 1 | SMCR, SMS | |
| RAI14 | Retinoic acid induced 14 | NORPEG, RAI13 | |
| RALA | v-far similar leukemia viral oncogene homolog A (ras-related) | RAL | |
| RALBP1 | RalA binding protein 1 | RIP1, RLIP1, RLIP76 | |
| RALGAPA1 | Ras GTPase activating protein, alpha subunit | GARNL1, GRIPE, RalGAPalpha1, TULIP1, p240 | |
| RALGAPA2 | Ras GTPase activating protein, alpha subunit 2 (retrotrans) | RP11-470C13.2, AS250, C200H174, BA287B20.1, JH1040C11, JH1040C11.4, s320 | |
| RALGAPB | Ras GTPase activating protein, beta subunit | RP5-1100H13.1, KIAA1219, RalGAPbeta | |
| RALGDS | Ras guanine nucleotide dissociation | RP11-326L24.1, RGDS, RGF, RalGEF | √ |
| RALGPS2 | Ras GEF with PH domain and SH3 binding motif 2 | RP4-595C2.1, dJ595C2.1 | |
| RALYL | RALY RNA binding protein-like | HNRPCL3 | |
| RAN | RAN, member RAS oncogene family | OK/SW-cl.81, ARA24, Gsp1, TC4 | |
| RANBP17 | RAN binding protein 17 | | √ |
| RANBP3 | RAN binding protein 3 | | |
| RANBP6 | RAN binding protein 6 | | |
| RAP1A | RAP1A, member of RAS oncogene family | C21KG, G-22K, KREV-1, KREV1, RAP1, SMGP21 | |
| RAP1B | RAP1B, member of RAS oncogene family | OK/SW-cl.11, K-REV, RAL1B | |
| RAP1BL | RAP1B, member of RAS oncogene family pseudogene | hCG_1757335 | |
| RAP1GAP2 | RAP1 GTPase activating protein 2 | GARNL4, RAP1GA3 | |
| RAP1GDS1 | RAP1, GTP-GDP dissociation stimulator 1 | GDS1, SmgGDS | √ |
| RAP2A | RAP2A, member of RAS oncogene family | RP11-128N14.2, K-REV, KREV, RAP2, RbBP-30 | |
| RAPGEF2 | Rap guanine nucleotide exchange factor (GEF) 2 | CN1ASG1F, INKAFG1, PDZ-GEF1, PDZGEF1, RA-GEF, RA-GEF-1, Ras-GEF, Ras-GEF | |
| RAPGEF3 | Rap guanine nucleotide exchange factor (GEF) 3 | CAMP-GEFI, EPAC, EPAC1, HSU79275, bcm910 | |
| RAPGEF4 | Rap guanine nucleotide exchange factor (GEF) 4 | 2, CAMP-GEFII, CGEF2, EFAC, EFAC2, EFAC2, NLL-00406 | |
| RAPGEF5 | Rap guanine nucleotide exchange factor (GEF) 5 | tcag7.1034, GFR, MR-GEF, REPAC | |
| RAPH1 | Ras association (RalGDS/AF-0) and | ALS2CR18, ALS2CR9, LFD, FNEL-2, FNEL2, RMI01, | |
| RASA1 | RAS p21 protein activator (GTPase activating protein) 1 | CM-AVM, CM-AVM, GAF, FKWS, KASA, KASUAL, s120CAD, s120BASCAD | |
| RASA4 | RAS p21 protein activator 4 | CAPRI, GAPL | |
| RASA4B | RAS p21 protein activator 4B | Chromosome 7, NC_000007.14 (102463139..102517777, complement) | |
| RASAL2 | RAS protein activator like 2 | RP4-593C16.1, NGAP | |
| RASGRF2 | Ras protein-specific guanine nucleotide-releasing factor 2 | GRF2, RAS-GRF2 | |

| | | | |
|---------|--|--|---|
| RASGRP3 | RABIF RAB interacting factor | | |
| RASGRP4 | RAS guanyl releasing protein 4 | | |
| RASIP1 | Ras interacting protein 1 | RAIN | |
| RASL10B | RAS-like, family 10, member B | RRP17, VTS58635 | |
| RASSF1 | Ras association (Raf/GDP/ATP-0) domain family (N-terminal) member 1 | 123F2, NORE2AA, RDA32, REH3P21, RASSF1 | |
| RASSF2 | Ras association (Raf/GDP/ATP-0) domain family (N-terminal) member 2 | RP4-599I11.1, CENP-34, RASFADIN | |
| RASSF6 | Ras association (Raf/GDP/ATP-0) domain family (N-terminal) member 6 | | |
| RASSF8 | Ras association (Raf/GDP/ATP-0) domain family (N-terminal) member 8 | C12orf2, HOJ1 | |
| RB1 | Retinoblastoma 1 | RP11-174H0.1, CSRC, TTT1K150, RD, p107-K0, pK0, p110 | v |
| RBAK | RB-associated KRAB zinc finger | ZNF769 | |
| RBBP5 | Retinoblastoma binding protein 5 | RBQ3, SWD1 | |
| RBBP7 | Retinoblastoma binding protein 7 | RP11-716A19.5, RbAp46 | |
| RBCK1 | RanBP1-type and C5HC4-type zinc finger protein 1 | RP3-652M4.4, C200H16, HOIL-1, HOIL1, FDMEL, RBCK2, RNF54, URCE7IP2, YAP2, YAP4, ZBRAND4 | |
| RBL2 | Retinoblastoma-like 2 | P130, Rb2 | |
| RBM12B | RNA binding motif protein 12B | MGC:33837 | |
| RBM14 | RNA binding motif protein 14 | COAA, PSP2, SIP, SYTIP1, TMEM137 | |
| RBM17 | RNA binding motif protein 17 | RP11-414H17.9, SPF45 | |
| RBM18 | RNA binding motif protein 18 | | |
| RBM22 | RNA binding motif protein 22 | 199G4, Cwc2, ZC3H16, fSAP47 | |
| RBM24 | RNA binding motif protein 24 | RNPC6, dJ259A10.1 | |
| RBM25 | RNA binding motif protein 25 | NET52, RED120, RNPC7, S164, Snu71, fSAP94 | |
| RBM26 | RNA binding motif protein 26 | RP11-777, ARK52, C150H10, TTT1K152, SE70-2, ZC3H17 | |
| RBM27 | RNA binding motif protein 27 | ARRS1, Psc1, ZC3H18 | |
| RBM33 | RNA binding motif protein 33 | hCG_20114, PRR8 | |
| RBM34 | RNA binding motif protein 34 | RP11-739C15.1 | |
| RBM38 | RNA binding motif protein 38 | HSRNASEB, RNPC1, SEB4B, SEB4D, dJ800J21.2 | |
| RBM39 | RNA binding motif protein 39 | RP11-555C16.2, CAPER, CAPERalpha, PSAF39, HCC1, RNPC2 | |
| RBM41 | RNA binding motif protein 41 | RP13-383K5.1 | |
| RBM43 | RNA binding motif protein 43 | C2orf38 | |
| RBM44 | RNA binding motif protein 44 | Gm817 | |
| RBM46 | RNA binding motif protein 46 | CT68 | |
| RBM47 | RNA binding motif protein 47 | NET18 | |
| RBM5 | RNA binding motif protein 5 | H37, G15, LUCA15, RMB5 | |

| | | | |
|---------|---|--|--|
| RBM6 | RNA binding motif protein 6 | 3G2, DEF-3, DEF3, HLC-11, NY-LU-12, g16 | |
| RBM8A | RNA binding motif protein 8A | HSPC114, BOV-1A, BOV-1B, BOV-1C, CIDLLq21.1, | |
| RBMS1 | RNA binding motif, single stranded | CEL112, HCC-4, MSS1, MSS1-1, MSS1-2, MSS1-3, | |
| RBMS2 | RNA binding motif, single stranded | SCR2, YC1 | |
| RBMS3 | RNA binding motif, single stranded | SCR3 | |
| RBMX | RNA binding motif protein, X-linked | RP11-1114A3.1, HINK1C, HINK1C1, RDMAN1, | |
| RBMXL1 | RNA binding motif protein, X-linked-like 1 | RPMY, h-RND, C, RPMY | |
| RBMY2FP | RNA binding motif protein, Y-linked | RP4-531M19.2, RBM1 | |
| RBPJ | RNA binding protein with multiple splicing | AGS3, CBT1, TOKJKB, TOKJKB1, KBT2, KBT-JK, | |
| RBPM5 | RNA binding protein with multiple splicing | DDSLH, SHL, and RBDI | |
| RBPM2 | RNA binding protein with multiple splicing | HERMES | |
| RC3H1 | Ring finger and CCCH-type domains 1 | 5730557L09Rik, Gm551, N28103, mKIAA2025 | |
| RCAN1 | Regulator of calcineurin 1 | ADAPT78, CSP1, DSC1, DSCR1, MCIP1, RCN1 | |
| RCBTB2 | Regulator of chromosome condensation | CHC1L, RLG | |
| RCC2 | Regulator of chromosome condensation 2 | TD-60 | |
| RCHY1 | Ring finger and C1H1 zinc finger domain | AKN1, CHMP, FIK12, FKBP90, KNP199, ZCH1, | |
| RCL1 | RNA terminal phosphate cyclase-like 1 | ZNF262 | |
| RCN1 | Retenitocarin 1, EF-hand calcium binding | RP11-125K10.1, RNAC, RPCL1 | |
| RCN2 | Retenitocarin 2, EF-hand calcium binding | HEL-S-84, PIG20, RCAL, RCN | |
| RCOR1 | REST corepressor 1 | E6BP, ERC-55, ERC55, TCBP49 | |
| RCOR3 | REST corepressor 3 | COREST, RCOR | |
| RCSD1 | RCSD domain containing 1 | RP11-318L16.1 | |
| RD3 | RCSD domain containing 1 | RP3-503M14.1, CAPZIP, MK2S4 | |
| RDH10 | Retinal degeneration 3 | C1orf36, LCA12 | |
| RDH11 | Retinol dehydrogenase 10 (all-trans) | UNQ9375/PRO34191, SDR16C4 | |
| RDH12 | Retinol dehydrogenase 12 (all-trans/9-cis/11- | LCA13, LCA3, RP53, SDR7C2 | |
| RDX | Radixin | DFNB24 | |
| REC8 | REC8 meiotic recombination protein | HR21spBL1, Rec8p, REC8 | |
| RECK | Reversion-inducing-cysteine-rich protein | ST15 | |
| RECQL | with loop motifs | RECQL1, RecQ1 | |
| RECQL5 | RecQ helicase-like | RECQ5 | |
| REEP1 | RecQ protein-like 5 | C2orf23, HMN5B, SPG31 | |
| REEP3 | Receptor accessory protein 1 | RP11-439F7.1, C10orf74 | |
| REEP5 | Receptor accessory protein 3 | C5orf18, D5S346, DP1, TB2, YOP1 | |
| | Receptor accessory protein 5 | | |

| | | | |
|---------|--|---------------------------------------|--|
| REG4 | Regenerating islet-derived family, member 4 | RP5-1042I8.1, GISP, REG-IV, RELP | |
| RELT | RELT tumor necrosis factor receptor | TNFRSF19L, TRLT | |
| REPIN1 | Replication initiator 1 | AP4, RIP60, ZNF464, Zfp464 | |
| REPS2 | KALBP1 associated Eps domain containing Arginine-glutamic acid dipeptide (RE) | RP11-2K15.3, POB1 | |
| RERE | Retinyl saturase (all-trans-retinol 13,14- reductase) | RP11-141M15.2, ARG, ARP, ATN1L, DNB1 | |
| RETSAT | | UNQ439/PRO872 | |
| REV1 | REV1, polymerase (DNA directed) | REV1L | |
| RFC1 | Replication factor C (activator 1) 1, 145 kDa | A1, MHCBFB, PO-GA, RECC1, RFC40, RFC1 | |
| RFC3 | Replication factor C (activator 1) 3, 38 kDa | RFC38 | |
| RFK | Riboflavin kinase | RP11-422N19.2, RIFK | |
| RFTN1 | Raftlin, lipid raft linker 1 | MIG2, PIB10, PIG9, RAFTLIN | |
| RFTN2 | Raftlin family member 2 | C2orf11, Raftlin-2 | |
| RFX2 | Regulatory factor X, 2 (influences HLA class II expression) | | |
| RFX3 | Regulatory factor X, 3 (influences HLA class II expression) | RP11-32F11.1 | |
| RFX4 | Regulatory factor X, 4 (influences HLA class II expression) | NYD-SP10 | |
| RFX7 | Regulatory factor X, 7 | RFXDC2 | |
| RG9MTD1 | | | |
| RG9MTD2 | | | |
| RGL1 | Ran guanine nucleotide dissociation inhibitor 1 | RP11-498P10.1, RGL | |
| RGMA | Repulsive guidance molecule family member 1 | RGM | |
| RGMB | Repulsive guidance molecule family member 2 | DRAGON | |
| RGNEF | Ran guanine nucleotide exchange factor (GDP) | RGNEF, RIP2, p190RHOGEF | |
| RGPD1 | KALBP1 2-like and GDI domain containing 1 | RGP1, RGPD2, RanBP2L2 | |
| RGPD2 | KALBP1 2-like and GDI domain containing 2 | NUP358, RANBP2L2, RGP2 | |
| RGPD3 | KALBP1 2-like and GDI domain containing 3 | RGP3 | |
| RGPD5 | KALBP1 2-like and GDI domain containing 5 | BS-63, BS63, HEL161, RGP5 | |
| RGPD6 | KALBP1 2-like and GDI domain containing 6 | RGP6, RGPD7, RanBP2L1, RanBP2L2 | |
| RGPD8 | KALBP1 2-like and GDI domain containing 8 | RANBP2L1, RGP8, RanBP2alpha | |
| RGS1 | Regulator of G-protein signaling 1 | 1R20, BL34, HEL-S-87, IER1, IR20 | |
| RGS12 | Regulator of G-protein signaling 12 | RP11-529E10.1 | |
| RGS13 | Regulator of G-protein signaling 13 | RP11-92K2.1 | |
| RGS16 | Regulator of G-protein signaling 16 | A28-RGS14, A28-RGS14P, RGS-R | |
| RGS18 | Regulator of G-protein signaling 18 | RP11-142L4.1, RGS13 | |

| | | | |
|---------|--|---|--|
| RGS2 | Regulator of G-protein signaling 2 | GIG31, G0S8 | |
| RGS21 | Regulator of G-protein signaling 21 | | |
| RGS22 | Regulator of G-protein signaling 22 | CT145, PRTD-NY2 | |
| RGS3 | Regulator of G-protein signaling 3 | RP11-168K11.4, C2PA, RGP3 | |
| RGS5 | Regulator of G-protein signaling 5 | RP11-207N12.5, MST092, MST100, MST129, MSTP022, MSTP092, MSTP106, MSTP129 | |
| RGS6 | Regulator of G-protein signaling 6 | GAP | |
| RGS9BP | Regulator of G-protein signaling 9 binding protein | PERRS, R9AP, RGS9 | |
| RHBDD1 | Rhomboid domain containing 1 | HSD50, RRP4 | |
| RHBDL3 | Rhomboid, veinlet-like 3 (Drosophila) | RHBDL4, VRHO | |
| RHOB | Ras homolog family member B | ARH6, ARHB, MST081, MSTP081, RHOH6 | |
| RHOBTB1 | Rho-related BTB domain containing 1 | | |
| RHOBTB2 | Rho-related BTB domain containing 2 | DBC2 | |
| RHOBTB3 | Rho-related BTB domain containing 3 | | |
| RHOG | Ras homolog family member G | ARHG | |
| RHOQ | Ras homolog family member Q | ARHQ, HEL-S-42, RASL7A, TC10, TC10A | |
| RHOT1 | Ras homolog family member T1 | ARHT1, MIRO-1, MIRO1 | |
| RHOU | Ras homolog family member U | SB128, ARHU, CDC42L1, G28K, WRCH1, hG28K | |
| RIC3 | RIC3 acetylcholine receptor chaperone | UNQ720/PRO1385, AYST720, PRO1385 | |
| RIC8A | RIC8 guanine nucleotide exchange factor A | RIC8 | |
| RIC8B | RIC8 guanine nucleotide exchange factor B | RIC8, hSyn | |
| RICTOR | RICTOR independent companion of mTOR, complex 2 | AVO3, PIA, hAVO3 | |
| RIF1 | Replication timing regulatory factor 1 | | |
| RILPL1 | Rab interacting lysosomal protein-like 1 | GOSPEL, RLP1 | |
| RIMKLA | lysosomal modification protein rimk-like family member A | | |
| RIMKLB | lysosomal modification protein rimk-like family member B | FAM80B, NAAGS, NAAGS-I | |
| RIMS1 | Regulating synaptic membrane exocytosis 1 | RP5-1046G13.1, CORD7, RAB3IP2, RIM, RIM1 | |
| RIMS2 | Regulating synaptic membrane exocytosis 2 | OBOE, RAB3IP3, RIM2 | |
| RIMS3 | Regulating synaptic membrane exocytosis 3 | RP4-739H11.2, NIM3, RIM3 | |
| RIMS4 | Regulating synaptic membrane exocytosis 4 | C200H190, RIM4, RIM4, RIM4, RIM4-gamma, RIM4-omega | |
| RIN2 | Ras and Rab interactor 2 | RP1-122P22.2, MACS, RASSF4 | |
| RINL | Ras and Rab interactor-like | | |
| RIOK2 | RIO kinase 2 | RIO2 | |
| RIOK3 | RIO kinase 3 | SUDD | |

| | | | |
|---------|---|--|--|
| RIT1 | Ras-like without CAAX 1 | RP11-101O6.4, NS8, RIBB, RIT, ROC1 | |
| RLBP1 | Retinaldehyde binding protein 1 | CRALBP | |
| RLF | Rearranged L-myc fusion | RP1-39G22.1, ZN-15L, ZNF292L | |
| RLIM | Ring finger protein, LIM domain interacting | CTD-2530H13.3, NY-REN-43, RNF12 | |
| RMI1 | RecQ mediated genome instability 1 required for meiotic nuclear division 5 | RP11-346I8.1, BLAP75, C9orf76, FAAP75 | |
| RMND5A | Rhabdomyosarcoma 2 associated transcript | CTLH, GID2, GID2A, RMD5, p44CTLH | |
| RMST | Ribonuclease, kinase A family, 9 (non-ribonuclease) | LINC00054, NCRMS, NCRNA00054 | |
| RNASE9 | Ribonuclease L (2,5'-oligoadenylate synthetase dependent) | HEL128, RAK1, h461 | |
| RNASEL | Ribonuclease L (2,5'-oligoadenylate synthetase dependent) | RP11-20H6.1, PRCA1, RNS4 | |
| RNASEN | Drosha, ribonuclease type III | ETOH12, HSAZ42770, KANSE3L, KNS, RNASE3L, RNASEN | |
| RNASET2 | Ribonuclease T2 | RP11-514O12.3, RNASE6PL, bA514O12.3 | |
| RNF10 | Ring finger protein 10 | RIE2 | |
| RNF103 | Ring finger protein 103 | HKF-1, KF-1, KF1, ZFP-103, ZFP103 | |
| RNF11 | Ring finger protein 11 | CGI-123, SID1669 | |
| RNF114 | Ring finger protein 114 | PSORS12, ZNF313 | |
| RNF115 | Ring finger protein 115 | BCA2, ZNF364 | |
| RNF125 | Ring finger protein 125, E3 ubiquitin protein ligase | TRAC-1, TRAC1 | |
| RNF128 | Ring finger protein 128, E3 ubiquitin protein ligase | RP11-150F24.1, GRAIL | |
| RNF13 | Ring finger protein 13 | RZF | |
| RNF14 | Ring finger protein 14 | HRIHFB2038, ARA54, HFB30, TRIAD2 | |
| RNF141 | Ring finger protein 141 | ZFP26, ZNF230 | |
| RNF144A | Ring finger protein 144A | RNF144, UBCE7IP4 | |
| RNF144B | Ring finger protein 144B | IBRDC2, PIR2, bA528A10.3, p53RFP | |
| RNF145 | Ring finger protein 145 | | |
| RNF146 | Ring finger protein 146 | RP3-351K20.1, dJ351K20.1 | |
| RNF157 | Ring finger protein 157 | | |
| RNF160 | | | |
| RNF165 | Ring finger protein 165 | ARKL2, RNF111L2 | |
| RNF168 | Ring finger protein 168, E3 ubiquitin protein ligase | hRNF168 | |
| RNF169 | Ring finger protein 169 | | |
| RNF17 | Ring finger protein 17 | RP11-756A22.1, Mmip-2, SPATA23, TDRD4 | |
| RNF170 | Ring finger protein 170 | ADSA, SNAX1 | |
| RNF182 | Ring finger protein 182 | | |

| | | | |
|---------|---|---|---|
| RNF183 | Ring finger protein 183 | | |
| RNF19A | Ring finger protein 19A, RNF19A ubiquitin protein ligase | RNF19 | |
| RNF19B | Ring finger protein 19B | IBRDC3, NKLAM | |
| RNF2 | Ring finger protein 2 | USP-120K12.1, DAF-1, DAF1, DING, HUP15, KING1B, RING2 | |
| RNF20 | Ring finger protein 20, E3 ubiquitin protein ligase | BRE1, BRE1A, hBRE1 | |
| RNF212 | Ring finger protein 212 | ZHP3 | |
| RNF213 | Ring finger protein 213 | hCG_1812857, ALO17, C17orf27, KIAA1618, MYMY2, MYSTR, NET57 | |
| RNF216L | Ring finger protein 213 | hCG_1812857, ALO17, C17orf27, KIAA1618, MYMY2, MYSTR, NET57 | |
| RNF219 | Ring finger protein 219 | C13orf7 | |
| RNF24 | Ring finger protein 24 | GIL | |
| RNF32 | Ring finger protein 32 | tcag7.575, FKSG33, HSD15, LMBR2 | |
| RNF34 | Ring finger protein 34, E3 ubiquitin protein ligase | CARP-1, CARP1, RFI, RIF, RIFF, hRFI | |
| RNF38 | Ring finger protein 38 | RP11-84P7.4 | |
| RNF4 | Ring finger protein 4 | RES4-26, SLX5, SNURF | |
| RNF40 | Ring finger protein 40, E3 ubiquitin protein ligase | BRE1B, RBP95, STARING | |
| RNF43 | Ring finger protein 43 | RNF124, URCC | √ |
| RNF5P1 | Ring finger protein 5, E3 ubiquitin protein ligase | | |
| RNF6 | Ring finger protein (C3H2C3 type) 6 | RP11-380N8.5 | |
| RNF7 | Ring finger protein 7 | CKBBP1, ROC2, SAG | |
| RNF8 | Ring finger protein 8, E3 ubiquitin protein ligase | hRNF8 | |
| RNFT1 | Ring finger protein, transmembrane 1 | PTD016 | |
| RNFT2 | Ring finger protein, transmembrane 2 | UNQ514, TMEM118 | |
| RNLS | Renalase, FAD-dependent amine oxidase | C10orf59, RENALASE | |
| RNMT | RNA (guanine-7-) methyltransferase | MET, RG7MT1, hCMT1c | |
| RNPC3 | RNA-binding region (RNP1, RNM1) | RBM40, RNP, SNRNP65 | |
| ROBO2 | Roundabout?, axon guidance receptor, kno-associated, conlcr-con containing protein ligase 1 | SAX3 | |
| ROCK1 | | P160ROCK, ROCK-I | |
| ROD1 | | | |
| ROR2 | | | |
| RORA | RAR-related orphan receptor A | NR1F1, ROR1, ROR2, ROR3, RZR-ALPHA, RZRA | |
| RORB | RAR-related orphan receptor B | NR1F2, ROR-BETA, RZR-BETA, RZRB, bA133M9.1 | |
| RP2 | Retinitis pigmentosa 2 (X-linked recessive) | DELXp11.3, NM23-H10, NME10, TBCCD2, XRP2 | |
| RP9 | Retinitis pigmentosa 9 (autosomal dominant) | PAP-1, PAPI | |

| | | | |
|----------|--|--|---|
| RPA1 | Replication protein A1, 70 kDa | HSSB, MST075, REPA1, RF-A, RP-A, RPA70 | |
| RPAP2 | RNA polymerase II associated protein 2 | C1orf82 | |
| RPAP3 | RNA polymerase II associated protein 3 | | |
| RPE65 | Retinal pigment epithelium-specific protein 65 kDa | BCO3, LCA2, RP20, mRPE65, rd12, sRPE65 | |
| RPGR | Retinitis pigmentosa GTPase regulator | COD1, CORDA1, CRD, FCDA, RPT3, RPS, ALK13, RPL15 | |
| RPGRIP1L | RPGRIP1-like | CORS3, FTM, JBTS7, MKS5, NPHP8, PPP1R134 | |
| RPH3A | Rabphilin 3A | | |
| RPIA | Ribose 5-phosphate isomerase A | RPI | |
| RPL11 | Ribosomal protein L11 | RP11-223J15.3, DBA7, GIG34, L11 | |
| RPL13A | Ribosomal protein L13a | L13A, TSTA1 | |
| RPL13AP3 | Ribosomal protein L13a pseudogene 3 | RPL13A_11_1370 | |
| RPL15 | Ribosomal protein L15 | FCDA10781, DBA12, EC45, E15, NPL10, NPL110, RPL10 | |
| RPL26L1 | Ribosomal protein L26-like 1 | RPL26P1 | |
| RPL27A | Ribosomal protein L27a | L27A | |
| RPL28 | Ribosomal protein L28 | L28 | |
| RPL3 | Ribosomal protein L3 | OK/SW-cl.32, ASC-1, L3, TARBP-B | |
| RPL32 | Ribosomal protein L32 | PP9932, L32 | |
| RPL36A | Ribosomal protein L36a | RP1-164F3.1, L36A, L44L, MIG6, RPL44 | |
| RPL37 | Ribosomal protein L37 | L37 | |
| RPL4 | Ribosomal protein L4 | L4 | |
| RPL5 | Ribosomal protein L5 | MSTP030, DBA6, L5, PPP1R135 | v |
| RPN2 | Ribophorin II | RP3-343K2.2, RIBIIR, RPN-II, RPNII, SWP1 | |
| RPP30 | Ribonuclease P/MRP 30 kDa subunit | RP11-320F15.1, TSG15 | |
| RPRD1A | regulation of nuclear pre-mRNA domain | HsT3101, P15RS | |
| RPRD1B | regulation of nuclear pre-mRNA domain | RPS-1057B20.2, C200H177, CREP1, NET00, H1057B20.2 | |
| RPRD2 | regulation of nuclear pre-mRNA domain containing 2 | HSPC099, KIAA0460 | |
| RPRML | Reprimo-like | | |
| RPS23 | Ribosomal protein S23 | S23 | |
| RPS27A | Ribosomal protein S27a | CEP80, HELTZ, SZ7A, UBA80, UBC, UBCEP1, UBCEP80 | |
| RPS29 | Ribosomal protein S29 | DBA13, S29 | |
| RPS6KA3 | ribosomal protein S6 kinase, 90 kDa, | RP11-595H10.3, CLS, HUC-3, ISPK-1, MAPKAPKB, MBX10, RSK, RSK2, SGK, S6K1, S6K2, S6K3 | |
| RPS6KA5 | ribosomal protein S6 kinase, 90 kDa, | MSK1, MSPK1, RLPK | |
| RPS6KB1 | ribosomal protein S6 kinase, 70 kDa, | FSOK, SOK, SOK-beta-1, SOK1, STK14A, p70 SOKA, S6K1, S6K2, S6K3 | |

| | | | |
|---------|--|---|---|
| RPS6KC1 | Ribosomal protein S6 kinase, 52 kDa, calcium-activated | RPK118, RSKL1, S6K-delta-1, S6PKh1, humS6PKh1 | |
| RPS7 | Ribosomal protein S7 | DBA8, S7 | |
| RPSA | Ribosomal protein SA | S7LKT, S7LK, ICAS, LAMBK, LAMKI, LDI, LDI/p40, LDD, LDDA, NEM/ICUD4, SA, LmP, p40 | |
| RPTN | Repetin | RP11-107M16.6 | |
| RPTOR | Regulatory associated protein of mTOR, | KOG1, Mip1 | |
| RPUSD4 | RNA pseudouridyate synthase domain containing 4 | | |
| RRAGA | Ras-related GTP binding A | FIP-1, FIP1, RAGA | |
| RRAGB | Ras-related GTP binding B | RP11-465E19.1, RAGB, bA465E19.1 | |
| RRAGD | Ras-related GTP binding D | RAGD, bA11D8.2.1 | |
| RREB1 | Ras responsive element binding protein 1 | RP11-69L16.1, FINB, HNT, LZ321, RREB-1, Zep-1 | |
| RRM1 | Ribonucleotide reductase M1 | R1, RIR1, RR1 | |
| RRM2B | Ribonucleotide reductase M2 B (H35 kDa) (hly) | MTDPS8A, MTDPS8B, P53R2 | |
| RRN3P2 | RNA polymerase II transcription factor | | |
| RRP12 | Ribosomal RNA processing 12 homolog (S. cerevisiae) | RP11-452K12.13-007, KIAA0690 | |
| RRP15 | Ribosomal RNA processing 15 homolog (S. cerevisiae) | CGI-115, KIAA0507 | |
| RRP1B | Ribosomal RNA processing 1B | KIAA0179, NNP1L, Nnp1, PPP1R136, RRP1 | |
| RSAD2 | Radical S-adenosyl methionine domain containing 2 | 2510004L01Rik, cig33, cig5, vig1 | |
| RSBN1 | Round spermatid basic protein 1 | RP11-324J2.1, ROSBIN | |
| RSL1D1 | Ribosomal L1 domain containing 1 | L12, CSIG, PBK1, UTP30 | |
| RSPH3 | Radial spoke 3 homolog (Chlamydomonas) | RSHL2, RSP3, dJ111C20.1 | |
| RSPO2 | R-spondin 2 | UNQ9384/PRO34209, CRISTIN2 | |
| RSRC1 | Arginine/serine-rich coiled-coil 1 | BM-011, SFRS21, SRrp53 | |
| RSU1 | Ras suppressor protein 1 | RSP-1 | |
| RTBDN | Retbindin | | |
| RTEL1 | Regulator of telomere elongation helicase 1 | RP4-583P15.2, C20orf41, DKCA4, DKCB5, NHL, RTEL | |
| RTF1 | Rtt1, Part of RNA polymerase II complex component, homolog (S. cerevisiae) | GTL7, KIAA0252 | |
| RTKN2 | Rhotekin 2 | RP11-531F24.1, PLEKHK1, bA531F24.1 | |
| RTN1 | Reticulon 1 | NSP | |
| RTN3 | Reticulon 3 | ASYIP, HAP, NSPL2, NSPLII-A1, RTN3 | |
| RUFY2 | RUN and FYVE domain containing 2 | RP11-153K11.2, RABIP4R, ZFYVE13 | |
| RUFY3 | RUN and FYVE domain containing 3 | RIPX, SINGAR1 | |
| RUNDC2A | RUN and FYVE domain containing 3 | RIPX, SINGAR1 | v |
| RUNDC3B | RUN domain containing 3B | RPIB9, RPIP9 | |

| | | | |
|---------|---|---|---|
| RUNX1 | Runt-related transcription factor 1 | AME1, AML1-EV1F1, AMLECK1, CBFA2, EVF1, DEBP2-B | √ |
| RUNX1T1 | Runt-related transcription factor 1, <i>translocated to 1 (AML1-Delta1)</i> | AML1T1, CBFA2T1, CDR, ETO, MTG8, ZMYND2 | |
| RUNX2 | Runt-related transcription factor 2 | RFT-100H4.1, AML2, CBF-alpha-1, CBFAT, CCD, CCD1, CLCD, OSE2, OSE2, REA2-A, DEBP2-A | |
| RUSC1 | RUN and SH3 domain containing 1 | RP11-21N7.4, NESCA | |
| RUVBL2 | RuvB-like AAA ATPase 2 | CGI-40, ECF51, INO80J, KLF11N, KVD2, TH12, TH40, TID40B | |
| RWDD2B | RWD domain containing 2B | GL011, C21orf6 | |
| RWDD3 | RWD domain containing 3 | RSUME | |
| RXRA | Retinoid X receptor, alpha | NR2B1 | |
| RYR3 | Ryanodine receptor 3 | RYR-3 | |
| S100BPB | S100P binding protein | S100PBPR | |
| S100Z | S100 calcium binding protein Z | Gm625, S100-zeta | |
| S1PR1 | Sphingosine-1-phosphate receptor 1 | CD303, CHELG1, D15502, ECG1, EDG-1, EDG1, S1P1 | |
| S1PR2 | Sphingosine-1-phosphate receptor 2 | AGR16, EDG-5, EDG5, Gpcr13, H218, LPB2, S1P2 | |
| S1PR3 | Sphingosine-1-phosphate receptor 3 | EDG-3, EDG3, LPB3, S1P3 | |
| SACMIL | SAC1 suppressor of actin mutations 1-like <i>(mouse)</i> | SAC1 | |
| SACS | sacsin molecular chaperone | ARSACS, DNAJC29, PPP1R138, SPAX6 | |
| SAE1 | SUMO1 activating enzyme subunit 1 | AOS1, HSPC140, SUA1, UBLE1A | |
| SALL2 | Spalt-like transcription factor 2 | HSAL2, Sal-2, ZNF795, p150(Sal2) | |
| SAMD12 | Sterile alpha motif domain containing 12 | | |
| SAMD3 | Sterile alpha motif domain containing 3 | RP11-73O6.2 | |
| SAMD4A | Sterile alpha motif domain containing 4A | SAMD4, SMAUG, SMAUG1, SMG, SMGA | |
| SAMD4B | Sterile alpha motif domain containing 4B | SMGB, hSmaug2 | |
| SAMD5 | Sterile alpha motif domain containing 5 | RP5-875H10.1, dJ875H10.1 | |
| SAMD8 | Sterile alpha motif domain containing 5 | RP5-875H10.1, dJ875H10.1 | |
| SAMD9 | Sterile alpha motif domain containing 9 | C7orf5, DRIF1, NFTC, OEF1, OEF2 | |
| SAMD9L | Sterile alpha motif domain containing 9-like | C7orf6, DRIF2, UEF1 | |
| SAMHD1 | SAM domain and HD domain 1 | RP1-132F21.1, CHBL2, DCIP, HDDC1, MOP-5, SBB188 | |
| SAP30BP | SAP30 binding protein | HCNGP, HTRG, HTRP | |
| SAP30L | SAP30-like | NS4ATP2 | |
| SAPS3 | | | |
| SAR1A | Secretion associated, Ras related GTPase 1A | RP11-367H5.4, SAR1, SARA1, Sara, masra2 | |
| SAR1B | Secretion associated, Ras related GTPase 1B | ANDD, CMRD, GTBPB, SARA2 | |
| SARM1 | Sterile alpha and TIR motif containing 1 | MyD88-5, SAMD2, SARM | |

| | | | |
|---------|--|--|--|
| SARNP | SAP domain containing ribonucleoprotein | CIP29, HCC1, HSPC316, THO1 | |
| SARS2 | Seryl-tRNA synthetase 2, mitochondrial | SARS, SARSM, SERS, SYS, SerRS, SerRSmt, mtSerRS | |
| SASH1 | SAM and SH3 domain containing 1 | RP3-323M4.1, SH3D6A, dJ323M4, dJ323M4.1 | |
| SAV1 | Salvador family WW domain containing protein 1 | SAV, WW45, WWP4 | |
| SBF2 | SET binding factor 2 | CMT4B2, DENND7B, MTMR13 | |
| SBK1 | SH3 domain binding kinase 1 | SBK | |
| SC5DL | | | |
| SCAI | Suppressor of cancer cell invasion | C9orf126, NET40 | |
| SCAMP1 | Secretory carrier membrane protein 1 | SCAMP, SCAMP37 | |
| SCAMP2 | Secretory carrier membrane protein 2 | | |
| SCAND2 | SCAN domain containing 2 pseudogene | SCAND2 | |
| SCAND3 | | | |
| SCAPER | S-phase cyclin A-associated protein in the ER | MSTP063, ZNF291, Zfp291 | |
| SCARA5 | Scavenger receptor class A, member 5 | UNQ2938/PRO28700, NET33, Tesr | |
| SCARB2 | Scavenger receptor class B, member 2 | AMRN1, CD30L2, EFM4, HEGF83, LGF83, LIMF-2, LIMF1, CD, RH | |
| SCARF1 | Scavenger receptor class F, member 1 | SREC, SREC-I, SREC1 | |
| SCARNA5 | small Cajal body-specific RNA 5 | | |
| SCD | Stearoyl-CoA desaturase (delta-9-desaturase) | PRO1933, FADS5, MSTP0081, SCDOS, SCD | |
| SCD5 | Stearoyl-CoA desaturase 5 | ACOD4, FADS4, HSCD5, SCD2, SCD4 | |
| SCFD1 | Sec1 family domain containing 1 | FKSG23, C14orf163, RA410, SLY1, SLY1P, STXBP1L2 | |
| SCG5 | Secretogranin V (7B2 protein) | 7B2, P7B2, SGNE1, SgV | |
| SCGB1D1 | Secretoglobin, family 1D, member 1 | LIPA, LPHA, LPNA | |
| SCGB1D2 | Secretoglobin, family 1D, member 2 | LIPB, LPHB, LPNB | |
| SCHIP1 | Schwannomin interacting protein 1 | SCHIP-1 | |
| SCLT1 | Sodium channel and clathrin linker 1 | CAP-1A, CAP1A | |
| SCLY | Selenocysteine lyase | SCL, hSCL | |
| SCML1 | Sex comb on midleg-like 1 (Drosophila) | RP3-389A20.1 | |
| SCML2 | Sex comb on midleg-like 2 (Drosophila) | RP5-1129A6.3 | |
| SCML4 | Sex comb on midleg-like 4 (Drosophila) | RP1-47M23.1, dJ47M23.1 | |
| SCN11A | Sodium channel, voltage-gated, type XI, | FEPS3, HSAN7, NAV1.9, NaN, PN5, SCN12A, SNS-2 | |
| SCN1A | Sodium channel, voltage-gated, type I, alpha | ELILE0, FEBS, FEBSA, FHM5, GEFSP2, HBSCL, NACT, Nav1.1, SCN1, SMEL | |
| SCN1B | Sodium channel, voltage-gated, type I, beta | ATFB13, BRGDA5, GEFSP1 | |
| SCN2B | Sodium channel, voltage-gated, type II, beta | UNQ326/PRO386, ATFB14 | |

| | | | |
|---------|---|---|---|
| SCN3A | Sodium channel, voltage-gated, type III, | NAC3, Nav1.3 | |
| SCN3B | Sodium channel, voltage-gated, type III, beta | ATFB16, BRGDA7, HSA243396, SCNB3 | |
| SCN4A | Sodium channel, voltage-gated, type IV, | HOKM12, HTRNF, HTRF, NACTA, Na(v)1.4, Nav1.4, | |
| SCN4B | Sodium channel, voltage-gated, type IV, beta | SLM1 | |
| SCN8A | Sodium channel, voltage-gated, type VIII, | ATFB17, LQT10, Navbeta4 | |
| SCN9A | Sodium channel, voltage-gated, type IX, | CERIII, CIAT, EIEE13, MED, NaCh6, Nav1.6, PN4 | |
| SCOC | Subunit | ETHA, FED5B, GELSP7, NE-NA, NEINA, NAV1.7, FN1, | |
| SCP2 | Short coiled-coil protein | SENP | |
| SCRN1 | Sterol carrier protein 2 | HRIHFB20720, SCOC | |
| SCRN2 | Secernin 1 | NLTP, NSL-TP, SCP-2, SCP-CHI, SCP-X, SCPX | |
| SCRN3 | Secernin 2 | SES1 | |
| SCUBE1 | Secernin 3 | SES2 | |
| SCUBE3 | Signal peptide, CUB domain, EGF-like 1 | SES3 | |
| SDAD1 | Signal peptide, CUB domain, EGF-like 3 | | |
| SDC2 | SDA1 domain containing 1 | CEGF3 | |
| SDC3 | Syndecan 2 | | |
| SDC4 | Syndecan 3 | CD362, HSPG, HSPG1, SYND2 | |
| SDCBP | Syndecan 4 | SDCN, SYND3 | |
| SDF2L1 | Syndecan binding protein (syntenin) | SYND4 | v |
| SDHAF1 | Stromal cell-derived factor 2-like 1 | MDA-9, ST1, SYCL, TACIP18 | |
| SDHAF2 | Succinate dehydrogenase complex assembly | UNQ1941/PRO4424 | |
| SDHAP1 | Succinate dehydrogenase complex, subunit | LYRM8 | |
| SDHAP2 | flavoprotein pseudogene 2 | | |
| SDK1 | Sidekick cell adhesion molecule 1 | | |
| SDPR | Serum deprivation response | CAVIN2, PS-p68, SDR, cavin-2 | |
| SDR42E1 | Short chain dehydrogenase/reductase family 4 | HSPC105 | |
| SEC1 | | | |
| SEC11A | SEC11 homolog A (<i>S. cerevisiae</i>) | 1810012E07Rik, SEC11L1, SPC18, SPCS4A, sid2895 | |
| SEC14L5 | SEC14-like 5 (<i>S. cerevisiae</i>) | PRELID4B | |
| SEC16A | SEC16 homolog A (<i>S. cerevisiae</i>) | RP11-413M3.10, KIAA0310, SEC16L, p250 | |
| SEC16B | SEC16 homolog B (<i>S. cerevisiae</i>) | LZTR2, PGPR-p117, RGPR, SEC16S | |
| SEC22A | SEC22 vesicle trafficking protein homolog | SEC22L2 | |
| SEC22C | SEC22 vesicle trafficking protein homolog C | UNQ459/PRO784, SEC22L3 | |
| SEC23IP | SEC23 interacting protein | MSTP053, P125, P125A | |
| SEC24A | SEC24 family member A | | |

| | | | |
|----------|--|--|--|
| SEC24B | SEC24 family member B | SEC24 | |
| SEC24C | SEC24 family member C | | |
| SEC24D | SEC24 family member D | | |
| SEC31B | SEC31 homolog B (<i>S. cerevisiae</i>) | SEC31B-1, SEC31L2 | |
| SEC61A2 | Sec61 alpha 2 subunit (<i>S. cerevisiae</i>) | | |
| SEC62 | SEC62 homolog (<i>S. cerevisiae</i>) | Dtrp1, HTP1, TLOC1, TP-1 | |
| SEC63 | SEC63 homolog (<i>S. cerevisiae</i>) | RP1-191J18.4, DNAJC23, ERdj2, PRO2507L, SEC63 | |
| SECISBP2 | SECIS binding protein 2 | RP11-89K14.1, SBP2 | |
| SEL1L | Sel-1 suppressor of lin-12-like (<i>C. elegans</i>) | UNQ128/PRO1063, PRO1063, SEL1-LIKE1, SEL1L | |
| SEL1L3 | Sel-1 suppressor of lin-12-like 3 (<i>C. elegans</i>) | Sel-1L3 | |
| SELE | Selectin E | RP11-111F20.2, CD62E, ELAM1, ELAM1, ESEL, LEGAM3 | |
| SELK | Selenoprotein K | HSPC030HSPC297, SelK | |
| SELT | Selenoprotein T | UNQ150/PRO176 | |
| SEMA3B | Sema domain, immunoglobulin domain (Ig), Sema domain, immunoglobulin domain (Ig), | LUCA-1, SEMA5, SEMAA, SemaA, semaV | |
| SEMA3C | Sema domain, immunoglobulin domain (Ig), Sema domain, immunoglobulin domain (Ig), | SEMAE, SemE | |
| SEMA3D | Sema domain, immunoglobulin domain (Ig), Sema domain, immunoglobulin domain (Ig), | UNQ760/PRO1491, Sema-Z2, coll-2 | |
| SEMA3E | Sema domain, immunoglobulin domain (Ig), Sema domain, immunoglobulin domain (Ig), | M-SEMAH, M-SemaK, SEMAH, coll-5 | |
| SEMA3G | Sema domain, immunoglobulin domain (Ig), Sema domain, immunoglobulin domain (Ig), | sem2 | |
| SEMA4C | Sema domain, immunoglobulin domain (Ig), Sema domain, immunoglobulin domain (Ig), | UNQ5855/PRO54487, M-SEMA-T, SEMA-CT1, SEMAF, SEMA-T | |
| SEMA4D | Sema domain, immunoglobulin domain (Ig), Sema domain, immunoglobulin domain (Ig), | AXYAC-11M08G7.1, C90H104, CD100, M-Sema-G, SEMA4 | |
| SEMA4F | Sema domain, immunoglobulin domain (Ig), Sema domain, immunoglobulin domain (Ig), | SEMA4, PRO2555, S4F, SEMAM, SEMAW, M-Sema- M | |
| SEMA4G | Sema domain, immunoglobulin domain (Ig), Sema domain, seven immunoglobulin repeats | RP11-108L7.1 | |
| SEMA5A | Sema domain, transmembrane domain (TM), Sema domain, transmembrane domain (TM), | SEMAF, semF | |
| SEMA6D | Sema domain, transmembrane domain (TM), Sema domain, transmembrane domain (TM), and extracellular domain (extracellular) (CD | | |
| SENP1 | SUMO1/sentrin specific peptidase 1 | SuPr-2 | |
| SENP2 | SUMO1/sentrin/SMT3 specific peptidase 2 | AXAM2, SMT3IP2 | |
| SENP5 | SUMO1/sentrin specific peptidase 5 | FKSG45 | |
| SENP7 | SUMO1/sentrin specific peptidase 7 | | |
| SEPSECS | Sep (G-phosphoserine) tRNA:Sec (selenocysteine) tRNA: synthesis | LP, PCH2D, SLA, SLA/LP | |
| SEPT1 | Septin 1 | DIFF6, LARP, PNUTL3, SEP1 | |
| SEPT11 | Septin 11 | | |
| SEPT18 | | | |
| SEPT2 | Septin 2 | DIFF6, NEDD-5, NEDD5, Pnutl3, hNedd5 | |

| | | | |
|-----------|--|---|---|
| SEPT3 | Septin 3 | CTA-250D10.3, SEP3, bK250D10.3 | |
| SEPT5 | Septin5 | CDCKEL, CDCKEL-1, CDCKEL1, HS, TICDCKEL-1, DNL1TL1 | |
| SEPT6 | Septin6 | RP5-876A24.2, SEP2, SEPT2 | v |
| SEPT8 | Septin8 | SEP2 | |
| SERHL | Serine hydrolase-like | CTA-120D4.2, DK120D4.1, DK120D4.2, H120D4Z, H122E12.1 | |
| SERHL2 | Serine hydrolase-like 2 | RP1-222E13.11-003, dJ222E13.1 | |
| SERINC1 | Serine incorporator 1 | UNQ396/PRO732, TDE1L, TDE2, TMS-2, TMS2 | |
| SERP1 | stress-associated endoplasmic reticulum | RAMP4 | |
| SERP2 | stress-associated endoplasmic reticulum | RP11-269C23.1, C13orf21, bA269C23.1 | |
| SERPINA1 | serpin peptidase inhibitor, class A (alpha-1) | FK00064, ATA, ATAI, AAI, FI, FII, FK02275, alpha1AT | |
| SERPINA3 | serpin peptidase inhibitor, class A (alpha-1) | GIG24, AACT, ACT, GIG25 | |
| SERPINA7 | serpin peptidase inhibitor, class A (alpha-1) | RP1-82J11.2, TBG | |
| SERPINB11 | serpin peptidase inhibitor, class B | EPIPIN, SERPIN11 | |
| SERPINB13 | serpin peptidase inhibitor, class B | HSHUR7SEQ, HUR7, PI13, headpin | |
| SERPINB5 | serpin peptidase inhibitor, class B | PI5, maspin | |
| SERPINB9 | serpin peptidase inhibitor, class B | CAP-3, CAP3, PI-9, PI9 | |
| SERPINE1 | serpin peptidase inhibitor, class E (nekin) | PAI, PAI-1, PAI1, PLANH1 | |
| SERPINF2 | serpin peptidase inhibitor, class E (nekin) | GDN, GDNPF, PI-7, PI7, PN-1, PN1, PNI | |
| SERPINI1 | serpin peptidase inhibitor, class I (neuroserpin) | PII2, neuroserpin | |
| SERTAD2 | SERTA domain containing 2 | Sei-2, TRIP-Br2 | |
| SERTAD4 | SERTA domain containing 4 | DJ667H12.2 | |
| SESN3 | Sestrin 3 | SEST3 | |
| SESTD1 | SEC14 and spectrin domains 1 | SOLO | |
| SETBP1 | SET binding protein 1 | SEB | v |
| SETD1B | SET domain containing 1B | KMT2G, Set1B | |
| SETD4 | SET domain containing 4 | C21orf18, C21orf27 | |
| SETD7 | SET domain containing (lysine methyltransferase) 7 | KMT7, SET7, SET7/9, SET9 | |
| SETDB2 | SET domain, bifurcated 2 | C13orf4, CLLD8, CLLL8, KMT1F | |
| SETMAR | SET domain and mariner transposase fusion gene | HsMar1, METNASE, Mar1 | |
| SETX | Senataxin | RP11-203M2.2, ALS4, AOA2, SCAR1, bA479K20.2 | |
| SEZ6L | Seizure related 6 homolog (mouse)-like | RP3-341O5.1 | |
| SF1 | Splicing factor 1 | BBP, D11S636, MBBP, ZCCHC25, ZFM1, ZNF162 | |
| SF3A1 | Splicing factor 3a, subunit 1, 120 kDa | PRP21, PRPF21, SAP11420, SF3A1 | |

| | | | |
|-----------|---|---|---|
| SF3A3 | Splicing factor 3a, subunit 3, 60 kDa | PRP9, PRPF9, SAP61, SF3a60 | |
| SF3B1 | Splicing factor 3b, subunit 1, 155 kDa | Hsh155, MDS, PRP10, PRPF10, SAP155, SF3b155 | √ |
| SF3B3 | Splicing factor 3b, subunit 3, 130 kDa | RSE1, SAP130, SF3b130, STAF130 | |
| SF4 | SURP and G patch domain containing 1 | F23858, RBP, SF4 | |
| SFMBT2 | Scm-like with four mbt domains 2 | RP11-393K12.3 | |
| SFRP4 | Secreted frizzled-related protein 4 | FRP-4, FRPHE, sFRP-4 | |
| SFRP5 | Secreted frizzled-related protein 5 | SARP3 | |
| SFRS1 | | | |
| SFRS11 | Serine/arginine-rich splicing factor 11 | RP4-677H15.3, NET2, SFRS11, dJ677H15.2, p54 | |
| SFRS12 | Splicing regulatory glutamine/lysine-rich protein 1 | SFRS12, SRrp508, SRrp86 | |
| SFRS12IP1 | SREK1-interacting protein 1 | P18SRP, SFRS12IP1 | |
| SFRS13A | Serine/arginine-rich splicing factor 10 | RP11-4M25.0, FUSH1, FUSH2, NSSK, PTTFR149, SFRS12, SFRS13A, SRp28, SRp40, TASP, TASP1 | |
| SFRS13B | | | |
| SFRS14 | | | |
| SFRS17A | | | |
| SFRS18 | | | |
| SFRS2B | | | |
| SFRS2IP | | | |
| SFRS3 | Serine/arginine-rich splicing factor 3 | SFRS3, SRp20 | √ |
| SFRS5 | | | |
| SFRS7 | | | |
| SFT2D1 | SFT2 domain containing 1 | C6orf83, pRGR1 | |
| SFT2D2 | SFT2 domain containing 2 | RP4-747L4.1, UNQ512, dJ747L4.C1.2 | |
| SFTPA1 | Surfactant protein A1 | RP11-589B3.2, COLEC4, TSAI, TSAI-A, TSAI-B, SFTPA1B, SP-A, SP-A1, SPA, SPA1, SFTPA1 | |
| SFTPB | Surfactant protein B | PSP-B, SFTB3, SFTP3, SMDP1, SP-B | |
| SFXN1 | Sideroflexin 1 | | |
| SFXN2 | Sideroflexin 2 | RP11-47A8.2 | |
| SFXN3 | Sideroflexin 3 | RP11-108L7.3, BA108L7.2, SFX3 | |
| SFXN5 | Sideroflexin 5 | BBG-TCC | |
| SGCB | Sarcoglycan, beta (45 kDa dystrophin-associated protein) | A3b, LGMD2E, SGC | |
| SGCD | Sarcoglycan, delta (55 kDa dystrophin-associated protein) | 35DAG, CMD1L, DAGD, SG-deltaP, SGD, SGCD | |
| SGCE | Sarcoglycan, epsilon | UNQ433/PRO840, DYT11, ESG | |
| SGCZ | Sarcoglycan, zeta | ZSG1 | |

| | | | |
|----------|---|--|---|
| SGEF | | | |
| SGIP1 | SH3-domain GRB2-like (endophilin) interacting protein 1 | RP11-266I14.1 | |
| SGK1 | Serum/glucocorticoid regulated kinase 1 | RP1-188K17.1, SGK | |
| SGK2 | Serum/glucocorticoid regulated kinase 2 | RP1-138B7.2, H-SGK2, dJ138B7.2 | |
| SGK269 | Pseudopodium-enriched atypical kinase 1 | SGK269 | |
| SGK3 | Serum/glucocorticoid regulated kinase family member 2 | CISK, SGK2, SGKL | |
| SGMS1 | Sphingomyelin synthase 1 | MOB, MOB1, SMS1, TMEM23, hmob33 | |
| SGMS2 | Sphingomyelin synthase 2 | SMS2 | |
| SGOL2 | Shugoshin-like 2 (S. pombe) | SGO2, TRIPIN | |
| SGPP1 | Sphingosine-1-phosphate phosphatase 1 | SPPase1 | |
| SGSH | N-sulfoglucosamine sulfohydrolase | HSS, MPS3A, SFMD | |
| SGSM2 | Small G protein signaling modulator 2 | RUTBC1 | |
| SGTB | Small glutamine-rich tetratricopeptide repeat (STR) containing beta | SGT2 | |
| SH2B3 | SH2B adaptor protein 3 | IDDM20, LNK | ✓ |
| SH2D1B | SH2 domain containing 1B | EAT2 | |
| SH2D3C | SH2 domain containing 3C | RP11-56D16.1, CHAT, NSP3, PRO34088, SHEP1 | |
| SH2D4A | SH2 domain containing 4A | PPP1R38, SH2A | |
| SH2D4B | SH2 domain containing 4B | RP11-514F8.1 | |
| SH2D6 | SH2 domain containing 6 | | |
| SH2D7 | SH2 domain containing 7 | hCG_38941 | |
| SH3BP2 | SH3-domain binding protein 2 | RES4-23, 3BP-2, 3BP2, CRBM, CRPM | |
| SH3GLB1 | SH3-domain GRB2-like endophilin B1 | CGI-61, Bif-1, PPP1R70, dJ612B15.2 | |
| SH3KBP1 | SH3-domain kinase binding protein 1 | RP11-545E8.1, CDZDF3, CIN65, GIG10, HSD-1, HSD1, MGC18 | |
| SH3PXD2B | SH3 and PX domains 2B | FAD49, FTHS, HOF1, KIAA1295, TKS4, TSK4 | |
| SH3RF1 | SH3 domain containing ring finger 1 | POSH, RNF142, SH3MD2 | |
| SH3RF3 | SH3 domain containing ring finger 3 | POSH2, SH3MD4 | |
| SH3TC2 | SH3 domain and tetratricopeptide repeats 2 | PP12494, CMT4C, MNMN | |
| SHANK2 | SH3 and multiple ankyrin repeat domains 2 | ACU1317, COR1B1, CTNBD11, FUSAP1, SHANK, SPANK2 | |
| SHANK3 | SH3 and multiple ankyrin repeat domains 3 | DEL22q13.3, PROSAP2, PSAP2, SCZD15, SPANK-2 | |
| SHB | Src homology 2 domain containing adaptor | | |
| SHC4 | Src (SHC homology 2 domain containing) family member 4 | UNQ6438/PRO21364, RaLP, SHCD | |
| SHE | Src homology 2 domain containing E | RP11-350G8.8 | |
| SHISA6 | Shisa family member 6 | | |

| | | | |
|----------|---|---|--|
| SHISA9 | Shisa family member 9 | CKAMP44 | |
| SHMT1 | Serine hydroxymethyltransferase 1 (soluble) | CSHMT, SHMT | |
| SHOC2 | SOC-2 suppressor of clear homolog (C. elegans) | RP11-348N5.2, SIAA0862, SOC2, SUR8 | |
| SHOX | Short stature homeobox | GCFX, PHOXY, SS, SHOX | |
| SHOX2 | Short stature homeobox 2 | OG12, OG12X, SHOT | |
| SHPRH | SHPRH histone H4K119 methyltransferase, ES | RP11-545I5.1, bA545I5.2 | |
| SHQ1 | SHQ1, 11/ACA ribonucleoprotein assembly factor | Shq1p | |
| SHROOM3 | Shroom family member 3 | MSTP013, APXL3, SHRM, ShrmL | |
| SIAE | Sialic acid acetyltransferase | AIS6, CSE-C, CSEC, LSE, YSG2 | |
| SIAH3 | Siah E3 ubiquitin protein ligase family member 3 | RP11-480G1.1 | |
| SIDT2 | SID1 transmembrane family, member 2 | CGI-40 | |
| SIGLEC1 | Sialic acid binding Ig-like lectin 1, sialoadhesin | CD169, SIGLEC-1, SN, dJ1009E24.1 | |
| SIGLEC14 | Sialic acid binding Ig-like lectin 14 | UNQ294 | |
| SIGLECP3 | Sialic acid binding Ig-like lectin, pseudogene 3 | SIGLECP2 | |
| SIK2 | Salt-inducible kinase 2 | LOH11CR11, QIK, SNF1LK2 | |
| SIK3 | SIK family kinase 3 | L19, QSK, SIK-3 | |
| SIKE1 | Suppressor of IKBKE 1 | RP5-1000E10.4, SIKE | |
| SIN3A | SIN3 transcription regulator family member A | | |
| SIN3B | SIN3 transcription regulator family member B | | |
| SIP1 | | | |
| SIPA1L2 | Signal-induced proliferation-associated 1 like 2 | SPAL2 | |
| SIRPA | Signal-regulatory protein alpha | IR4-064O24.2, B11, CD172A, MFK, MTD-1, P64, PTPNS1, SIRS1, SIRD | |
| SIRPB2 | Signal-regulatory protein beta 2 | RP4-776F14.1, PTPN1L, PTPNS1L3, dJ776F14.2 | |
| SIRT1 | Sirtuin 1 | RP11-57G10.3, SIR2L1 | |
| SIRT3 | Sirtuin 3 | SIR2L3 | |
| SIRT5 | Sirtuin 5 | SIR2L5 | |
| SIX2 | SIX homeobox 2 | | |
| SIX4 | SIX homeobox 4 | AREC3 | |
| SKA2 | Spindle and kinetochore associated complex subunit 2 | FAM33A | |
| SKAP2 | Src kinase associated phosphoprotein 2 | PRAP, RA70, SAPS, SCAP2, SKAP-HOM, SKAP55R | |
| SKIL | SKI-like proto-oncogene | SNO, SnoA, SnoI, SnoN | |
| SKIV2L2 | Superkiller viral protein activity 2-like 2 (D. melanogaster) | Dob1, KIAA0052, Mtr4, fSAP118 | |
| SKP1 | S-phase kinase-associated protein 1 | EMC19, OCP-II, OCP2A, TCEB1L, p19A, SKP1 | |

| | | | |
|----------|--|--|--|
| SLA | Src-like-adaptor | SLA1P, SLA | |
| SLAIN1 | SLAIN motif family, member 1 | RP11-188A23.1, C13orf32 | |
| SLAIN2 | SLAIN motif family, member 2 | KIAA1458 | |
| SLAMF6 | SLAM family member 6 | RP11-528G1.1, CD55Z, KALI, KALIB, Ly108, NTB-A, NTB-A, SE2000 | |
| SLAMF7 | SLAM family member 7 | UNQ576/PRO1138, 19A, CD319, CRACC, CS1 | |
| SLC10A7 | Solute carrier family 10, member 7 | PSEC0051, C4orf13, P7 | |
| SLC11A1 | Solute carrier family 11 (proton-coupled) | LSH, NRAMP, NRAMP1 | |
| SLC11A2 | Solute carrier family 11 (proton-coupled) | OK/SW-cl.20, DCT1, DMT1, NRAMP2 | |
| SLC12A2 | Solute carrier family 12 (sodium/cotransporter) member 2 | BSC, BSC2, NKCC1, PPP1R141 | |
| SLC12A3 | Solute carrier family 12 (sodium/cotransporter) member 3 | NCC, NCCT, TSC | |
| SLC12A5 | Solute carrier family 12 (potassium/chloride transporter) member 5 | RP11-465L10.5, KCC2 | |
| SLC12A8 | Solute carrier family 12, member 8 | CCC9 | |
| SLC13A3 | Solute carrier family 13 (sodium-dependent) | RP1-257E24.1, NADC3, SDCT2 | |
| SLC13A4 | Solute carrier family 13 (sodium/sulfate) | SUT-1, SUT1 | |
| SLC14A1 | Solute carrier family 14 (urea transporter), | UCP11, HST1341, JK, KACH1, KACH2, UT-D1, UT1, UTE | |
| SLC16A1 | Solute carrier family 16 (monocarboxylate transporter) member 1 | RP4-580L15.1, HHF7, MCT, MCT1 | |
| SLC16A14 | Solute carrier family 16, member 14 | MCT14 | |
| SLC16A2 | Solute carrier family 16, member 2 (lipoic coenzyme transporter) | RP11-449M9.1, AIDS, DAST26, DAST26L, MCT 7, MCT 8, MCT7, MCT8, MBX22, VDCT | |
| SLC16A4 | Solute carrier family 16, member 4 | RP5-1074L1.3, MCT4, MCT5 | |
| SLC16A6 | Solute carrier family 16, member 6 | MCT6, MCT7 | |
| SLC16A9 | Solute carrier family 16, member 9 | C10orf36, MCT9 | |
| SLC17A2 | Solute carrier family 17, member 2 | NPT3 | |
| SLC17A3 | Solute carrier family 17 (organic anion) | | |
| SLC17A6 | Solute carrier family 17 (vesicular glutamate) | DNPI, VGLUT2 | |
| SLC17A7 | Solute carrier family 17 (vesicular glutamate) | BNPI, VGLUT1 | |
| SLC17A8 | Solute carrier family 17 (vesicular glutamate) | DFNA25, VGLUT3 | |
| SLC19A2 | Solute carrier family 19 (unamine) | | |
| SLC19A3 | Solute carrier family 19 (unamine) | BBGD, THMD2, THTR2 | |
| SLC1A2 | Solute carrier family 1 (glutathione affinity) | EAAT2, GLT-1 | |
| SLC1A3 | Solute carrier family 1 (glutathione affinity) | EA6, EAAT1, GLAST, GLAST1 | |
| SLC1A4 | Solute carrier family 1 (glutathione affinity) | ASCT1, SATT | |
| SLC20A1 | Solute carrier family 20 (phosphate) | GLVR1, Glvr-1, PIT1, PiT-1 | |
| SLC22A12 | Solute carrier family 22 (organic anion/urate transporter) member 12 | UNQ6453/PRO34004, OAT4L, RST, URAT1 | |

| | | | |
|----------|---|--|--|
| SLC22A14 | Solute carrier family 22, member 14 | OCTL2, OCTL4, ORCTL4 | |
| SLC22A15 | Solute carrier family 22, member 15 | UNQ9429/PRO34686, FLIPT1, PRO34686 | |
| SLC22A2 | Solute carrier family 22 (organic cation transporter), member 2 | RP11-317M22.2, OCT2 | |
| SLC22A23 | Solute carrier family 22, member 23 | RP11-506K6.2, C6orf85 | |
| SLC22A25 | Solute carrier family 22, member 25 | HIMTP, UST6 | |
| SLC22A3 | Solute carrier family 22 (organic cation transporter), member 3 | RP11-72O9.3, EMT, EMTH, OCT3 | |
| SLC22A5 | Solute carrier family 22 (organic cation transporter), member 5 | CDSP, OCTN2, OCTN2VT | |
| SLC22A8 | Solute carrier family 22 (organic anion transporter), member 8 | OAT3 | |
| SLC22A9 | Solute carrier family 22 (organic anion transporter), member 9 | HOAT4, OAT4, OAT7, UST3H, ust3 | |
| SLC23A2 | Solute carrier family 23 (ascorbic acid transporter), member 2 | RP1-237C24.1, NBTL1, SLC23A1, SVCT2, YSPL2 | |
| SLC24A1 | Solute carrier family 24 (sodium-coupled) | CSNB1D, HsT17412, NCKX, NCKX1, RODX | |
| SLC24A3 | Solute carrier family 24 (sodium-coupled) | RP1-122P22.1, NCKX3 | |
| SLC24A4 | Solute carrier family 24 (sodium-coupled) | AI2A5, NCKX4, SHEP6, SLC24A2 | |
| SLC25A12 | Solute carrier family 25 (aspartate/glutamate transporter), member 12 | AGC1, ARALAR | |
| SLC25A15 | Solute carrier family 25 (mitochondrial aspartate/glutamate transporter), member 15 | RP11-346L13.4, D13S327, HHH, ORC1, ORNT1 | |
| SLC25A2 | Solute carrier family 25 (mitochondrial aspartate/glutamate transporter), member 2 | ORC2, ORNT2 | |
| SLC25A21 | Solute carrier family 25 (mitochondrial aspartate/glutamate transporter), member 21 | ODC, ODC1 | |
| SLC25A24 | Solute carrier family 25 (mitochondrial aspartate/glutamate transporter), member 24 | RP11-356N1.3, APC1, SCAMC-1 | |
| SLC25A25 | Solute carrier family 25 (mitochondrial aspartate/glutamate transporter), member 25 | RP11-395P17.4, MCSC, PCSCL, SCAMC-2 | |
| SLC25A27 | Solute carrier family 25, member 27 | RP11-446F17.2, UCP4 | |
| SLC25A29 | Solute carrier family 25 (mitochondrial aspartate/glutamate transporter), member 29 | C14orf69, CACL, ORNT3 | |
| SLC25A30 | Solute carrier family 25, member 30 | KMCP1 | |
| SLC25A32 | Solute carrier family 25 (mitochondrial aspartate/glutamate transporter), member 32 | MFT, MFTC | |
| SLC25A36 | Solute carrier family 25 (pyrimidine nucleotide carrier), member 36 | PNC2 | |
| SLC25A37 | Solute carrier family 25 (pyrimidine nucleotide carrier), member 37 | HT015, MFKN, MFKN1, MSC, MSC1, PRO1278, PRO1584, PRO2217 | |
| SLC25A38 | Solute carrier family 25, member 38 | | |
| SLC25A4 | Solute carrier family 25 (mitochondrial aspartate/glutamate transporter), member 4 | 1, AAC1, ANT, ANT1, ANT11, MIDP512, PEO2, PEO3, T1 | |
| SLC25A40 | Solute carrier family 25, member 40 | MCFP | |
| SLC25A44 | Solute carrier family 25, member 44 | RP11-54H19.3 | |
| SLC26A2 | Solute carrier family 26 (anion exchanger), member 2 | D5S1708, DTD, DTDST, EDM4, MST153, MSTP157 | |
| SLC26A4 | Solute carrier family 26 (anion exchanger), member 4 | DFNB4, EVA, PDS, TDH2B | |
| SLC26A7 | Solute carrier family 26 (anion exchanger), member 7 | SUT2 | |
| SLC26A9 | Solute carrier family 26 (anion exchanger), member 9 | | |

| | | | |
|----------|---|--|---|
| SLC27A3 | Solute carrier family 27 (fatty acid | PSEC0067, ACSVL3, FATP3, VLCS-3 | |
| SLC2A1 | Solute carrier family 2 (facilitated glucose | D1117, D1118, D119, EIG12, GLUT1, GLUT11, | |
| SLC2A12 | Solute carrier family 2 (facilitated glucose | GLUT12, GLUT8 | |
| SLC2A13 | Solute carrier family 2 (facilitated glucose | HMIT | |
| SLC2A3 | Solute carrier family 2 (facilitated glucose | GLUT3 | |
| SLC30A10 | Solute carrier family 30, member 10 | HMDPC, ZNT10, ZNT8, ZRC1, ZnT-10 | |
| SLC30A7 | Solute carrier family 30 (zinc transporter), | RP11-30G24.1, ZNT7, ZnT-7, ZnTL2 | |
| SLC30A8 | Solute carrier family 30 (zinc transporter), | ZNT8, ZnT-8 | |
| SLC30A9 | Solute carrier family 30 (zinc transporter), | C4orf1, GAC63, HUEL, ZNT9 | |
| SLC31A1 | Solute carrier family 31 (copper transporter), | RP11-110L1.1, COPT1, CTR1 | |
| SLC33A1 | Solute carrier family 33 (acetyl-CoA | ACATN, AT-1, AT1, CCHLND, SPG42 | |
| SLC34A2 | Solute carrier family 34 (type II | NAPI-3B, NAPI-IIIb, NPTIIb | √ |
| SLC35A1 | Solute carrier family 35 (CMI ⁻ -sialic acid | CDG2F, CMPST, CST, hCST | |
| SLC35A2 | Solute carrier family 35 (CMI ⁻ -sialic acid | CDG2M, CDG2X, UDF-Gal-II, UGALT, UGAT, UGT, | |
| SLC35A4 | Solute carrier family 35, member A4 | UCT1, UCT2, UCT3 | |
| SLC35B4 | Solute carrier family 35 (UDF-xylose/UDF- | PSEC0055, YEA, YEA4 | |
| SLC35C2 | Solute carrier family 35 (UDF-glucose | RP11-39402.1, BA39402.1, C20orf5, CGI-15, OVCOV1 | |
| SLC35D1 | Solute carrier family 35 (UDF-GlcA/UDF- | UGTREL7 | |
| SLC35D2 | Solute carrier family 35 (UDF-GlcNAc/UDF- | RP11-240L7.2, HFRC1, SQV7L, UGTrel8, hfrc | |
| SLC35D3 | Solute carrier family 35, member D3 | FRCL1, bA55K22.3 | |
| SLC35E1 | Solute carrier family 35, member E1 | PSEC0038 | |
| SLC35E2 | Solute carrier family 35, member E2 | RP1-283E3.5 | |
| SLC35E3 | Solute carrier family 35, member E3 | UNQ3043/PRO9859, BLOV1 | |
| SLC35F1 | Solute carrier family 35, member F1 | RP1-230I3.1, C6orf169, dJ230I3.1 | |
| SLC35F3 | Solute carrier family 35, member F3 | | |
| SLC35F4 | Solute carrier family 35, member F4 | C14orf36, c14_5373 | |
| SLC36A1 | Solute carrier family 36 (proton/amine acid | Dct1, LYAAT1, PAT1, TRAMD3 | |
| SLC37A3 | Solute carrier family 37, member 3 | | |
| SLC38A1 | Solute carrier family 38, member 1 | ATA1, NAT2, SAT1, SNAT1 | |
| SLC38A10 | Solute carrier family 38, member 10 | PP1744 | |
| SLC38A2 | Solute carrier family 38, member 2 | ATA2, PRO1068, SAT2, SNAT2 | |
| SLC38A4 | Solute carrier family 38, member 4 | ATA3, NAT3, PAAT | |
| SLC38A6 | Solute carrier family 38, member 6 | NAT-1 | |

| | | | |
|----------|--|--|--|
| SLC39A10 | Solute carrier family 39 (zinc transporter), member 10 | LZT-Hs2 | |
| SLC39A11 | Solute carrier family 39, member 11 | C17orf26, ZIP11 | |
| SLC39A12 | Solute carrier family 39 (zinc transporter), member 12 | LZT-Hs8, ZIP-12, bA570F3.1 | |
| SLC39A13 | Solute carrier family 39 (zinc transporter), member 13 | | |
| SLC39A14 | Solute carrier family 39 (zinc transporter), member 14 | LZT-Hs4, NET34, ZIP14, cig19 | |
| SLC39A3 | Solute carrier family 39 (zinc transporter), member 3 | ZIP-3, ZIP3 | |
| SLC39A6 | Solute carrier family 39 (zinc transporter), member 6 | LIV-1 | |
| SLC39A8 | Solute carrier family 39 (zinc transporter), member 8 | PP3105, BIGM103, LZT-Hs6, ZIP8 | |
| SLC39A9 | Solute carrier family 39 (zinc transporter), member 9 | UNQ714/PRO1377, ZIP-9, ZIP9 | |
| SLC3A1 | Solute carrier family 3 (amino acid transporter), member 1 | ATR1, CSNU1, D2H, NBAT, RBAT | |
| SLC41A2 | Solute carrier family 41 (magnesium transporter), member 2 | SLC41A1-L1 | |
| SLC43A1 | Solute carrier family 43 (amino acid system transporter), member 1 | LAT3, PB39, POV1, R00504 | |
| SLC44A1 | Solute carrier family 44 (chloride transporter), member 1 | RP11-287A8.1, CD92, CDW92, CHTL1, CTL1 | |
| SLC44A5 | Solute carrier family 44, member 5 | CTL5 | |
| SLC45A1 | Solute carrier family 45, member 1 | DNB5 | |
| SLC45A4 | Solute carrier family 45, member 4 | | |
| SLC46A1 | Solute carrier family 46 (urate transporter), member 1 | G21, HCP1, PCFT | |
| SLC46A2 | Solute carrier family 46, member 2 | Ly110, TSCOT | |
| SLC48A1 | Solute carrier family 48 (heme transporter), member 1 | HRG-1, HRG1, hHRG-1 | |
| SLC4A10 | Solute carrier family 4, sodium bicarbonate transporter, member 10 | NBCn2, NCBE | |
| SLC4A4 | Solute carrier family 4 (sodium bicarbonate transporter), member 4 | hNBC1, hNBC2, hNBC3, hNBC4, hNBC5, hNBC6, hNBC7, hNBC8, hNBC9, hNBC10, hNBC11, hNBC12, hNBC13, hNBC14, hNBC15, hNBC16, hNBC17, hNBC18, hNBC19, hNBC20, hNBC21, hNBC22, hNBC23, hNBC24, hNBC25, hNBC26, hNBC27, hNBC28, hNBC29, hNBC30, hNBC31, hNBC32, hNBC33, hNBC34, hNBC35, hNBC36, hNBC37, hNBC38, hNBC39, hNBC40, hNBC41, hNBC42, hNBC43, hNBC44, hNBC45, hNBC46, hNBC47, hNBC48, hNBC49, hNBC50, hNBC51, hNBC52, hNBC53, hNBC54, hNBC55, hNBC56, hNBC57, hNBC58, hNBC59, hNBC60, hNBC61, hNBC62, hNBC63, hNBC64, hNBC65, hNBC66, hNBC67, hNBC68, hNBC69, hNBC70, hNBC71, hNBC72, hNBC73, hNBC74, hNBC75, hNBC76, hNBC77, hNBC78, hNBC79, hNBC80, hNBC81, hNBC82, hNBC83, hNBC84, hNBC85, hNBC86, hNBC87, hNBC88, hNBC89, hNBC90, hNBC91, hNBC92, hNBC93, hNBC94, hNBC95, hNBC96, hNBC97, hNBC98, hNBC99, hNBC100 | |
| SLC4A7 | Solute carrier family 4, sodium bicarbonate transporter, member 7 | NBC2, NBC3, NBCN1, SBC2, SLC4A6 | |
| SLC4A8 | Solute carrier family 4, sodium bicarbonate transporter, member 8 | NBC3, NDCBE | |
| SLC5A1 | Solute carrier family 5 (sodium/glucose transporter), member 1 | RP1-127L4.1, D22S675, NAGT, SGLT1 | |
| SLC5A12 | Solute carrier family 5, member 12 | SMCT2 | |
| SLC5A3 | Solute carrier family 5 (sodium/myo-inositol transporter), member 3 | BCW2, SMIT, SMIT1, SMIT2 | |
| SLC5A8 | Solute carrier family 5, member 8 | AIT, SMCT, SMCT1 | |
| SLC5A9 | Solute carrier family 5 (sodium/sugar transporter), member 9 | SGLT4 | |
| SLC6A11 | Solute carrier family 6 (neurotransmitter transporter), member 11 | GAT-3, GAT3, GAT4 | |
| SLC6A12 | Solute carrier family 6 (neurotransmitter transporter), member 12 | BGT-1, BGT1, GAT2 | |
| SLC6A16 | Solute carrier family 6, member 16 | NT5, NTT5 | |
| SLC6A20 | Solute carrier family 6 (proton-coupled neurotransmitter transporter), member 20 | SIT1, XT3, Xtrp3 | |
| SLC6A6 | Solute carrier family 6 (neurotransmitter transporter), member 6 | TAUT | |

| | | |
|----------|--|--|
| SLC7A1 | Solute carrier family 7 (cationic amino acid transporters) | RP11-274A8.1, ATRC1, CAT-1, ERR, HCAT1, REC1L |
| SLC7A11 | Solute carrier family 7 (anionic amino acid transporters) | CCBR1, xCT |
| SLC7A13 | Solute carrier family 7 (anionic amino acid transporters), member 13 | AGT-1, AGT1, XAT2 |
| SLC7A14 | Solute carrier family 7, member 14 | PPP1R142 |
| SLC7A2 | Solute carrier family 7 (cationic amino acid transporters) | ATRC2, CAT2, HCAT2 |
| SLC7A5P2 | Solute carrier family 7 (amino acid transporters), member 5 | IMAA, MMAA |
| SLC7A6 | Solute carrier family 7, member 6 | LAT-2, LAT3, y+LAT-2 |
| SLC7A6OS | Solute carrier family 7, member 6 opposite | |
| SLC8A1 | Solute carrier family 8 (sodium/calcium transporters), member 1 | NCX1 |
| SLC8A3 | Solute carrier family 8 (sodium/calcium transporters), member 3 | NCX3 |
| SLC9A1 | | |
| SLC9A2 | Solute carrier family 9, subfamily A (NHE2) | NHE2 |
| SLC9A3R1 | Solute carrier family 9, subfamily A (NHE3) | EBP50, NHERF, NHERF-1, NHERF1, NPHLOP2 |
| SLC9A6 | Solute carrier family 9, subfamily A (NHE6) | RP11-274K13.1, MRSA, NHE6 |
| SLC9A8 | Solute carrier family 9, subfamily A (NHE8) | RP5-963K23.3, NHE-8, NHE8 |
| SLCO1A2 | Solute carrier organic anion transporter family, member 1A2 | OATP, OATP-A, OATP1A2, SLC21A3 |
| SLCO1B1 | Solute carrier organic anion transporter family, member 1B1 | IBLKK, LST-1, LST1, OATP-C, OATP1B1, OATP2, OATP3, SLC21A6 |
| SLCO3A1 | Solute carrier organic anion transporter family, member 3A1 | OATP-D, OATP3A1, OATPD, SLC21A11 |
| SLCO4A1 | Solute carrier organic anion transporter family, member 4A1 | OATP-E, OATP1, OATP4A1, OATPE, OATP1F1, OATP1F2, OATP1F3, OATP1F4, OATP1F5, OATP1F6, OATP1F7, OATP1F8, OATP1F9, OATP1F10, OATP1F11, OATP1F12, OATP1F13, OATP1F14, OATP1F15, OATP1F16, OATP1F17, OATP1F18, OATP1F19, OATP1F20, OATP1F21, OATP1F22, OATP1F23, OATP1F24, OATP1F25, OATP1F26, OATP1F27, OATP1F28, OATP1F29, OATP1F30, OATP1F31, OATP1F32, OATP1F33, OATP1F34, OATP1F35, OATP1F36, OATP1F37, OATP1F38, OATP1F39, OATP1F40, OATP1F41, OATP1F42, OATP1F43, OATP1F44, OATP1F45, OATP1F46, OATP1F47, OATP1F48, OATP1F49, OATP1F50, OATP1F51, OATP1F52, OATP1F53, OATP1F54, OATP1F55, OATP1F56, OATP1F57, OATP1F58, OATP1F59, OATP1F60, OATP1F61, OATP1F62, OATP1F63, OATP1F64, OATP1F65, OATP1F66, OATP1F67, OATP1F68, OATP1F69, OATP1F70, OATP1F71, OATP1F72, OATP1F73, OATP1F74, OATP1F75, OATP1F76, OATP1F77, OATP1F78, OATP1F79, OATP1F80, OATP1F81, OATP1F82, OATP1F83, OATP1F84, OATP1F85, OATP1F86, OATP1F87, OATP1F88, OATP1F89, OATP1F90, OATP1F91, OATP1F92, OATP1F93, OATP1F94, OATP1F95, OATP1F96, OATP1F97, OATP1F98, OATP1F99, OATP1F100 |
| SLCO4C1 | Solute carrier organic anion transporter family, member 4C1 | OATP-F, OATP11, OATP11M1, OATP11M2, OATP11M3, OATP11M4, OATP11M5, OATP11M6, OATP11M7, OATP11M8, OATP11M9, OATP11M10, OATP11M11, OATP11M12, OATP11M13, OATP11M14, OATP11M15, OATP11M16, OATP11M17, OATP11M18, OATP11M19, OATP11M20, OATP11M21, OATP11M22, OATP11M23, OATP11M24, OATP11M25, OATP11M26, OATP11M27, OATP11M28, OATP11M29, OATP11M30, OATP11M31, OATP11M32, OATP11M33, OATP11M34, OATP11M35, OATP11M36, OATP11M37, OATP11M38, OATP11M39, OATP11M40, OATP11M41, OATP11M42, OATP11M43, OATP11M44, OATP11M45, OATP11M46, OATP11M47, OATP11M48, OATP11M49, OATP11M50, OATP11M51, OATP11M52, OATP11M53, OATP11M54, OATP11M55, OATP11M56, OATP11M57, OATP11M58, OATP11M59, OATP11M60, OATP11M61, OATP11M62, OATP11M63, OATP11M64, OATP11M65, OATP11M66, OATP11M67, OATP11M68, OATP11M69, OATP11M70, OATP11M71, OATP11M72, OATP11M73, OATP11M74, OATP11M75, OATP11M76, OATP11M77, OATP11M78, OATP11M79, OATP11M80, OATP11M81, OATP11M82, OATP11M83, OATP11M84, OATP11M85, OATP11M86, OATP11M87, OATP11M88, OATP11M89, OATP11M90, OATP11M91, OATP11M92, OATP11M93, OATP11M94, OATP11M95, OATP11M96, OATP11M97, OATP11M98, OATP11M99, OATP11M100 |
| SLCO5A1 | Solute carrier organic anion transporter family, member 5A1 | OATP-J, OATP-RP4, OATP5A1, OATPRP4, SLC21A15 |
| SLFN11 | Schlafen family member 11 | SLFN8/9 |
| SLFN13 | Schlafen family member 13 | SLFN10 |
| SLFN5 | Schlafen family member 5 | |
| SLFNL1 | Schlafen-like 1 | RP11-348A7.4 |
| SLIT1 | Slit homolog 1 (Drosophila) | RP11-175O19.2, MEGF4, SLIL1, SLIT-1, SLIT3 |
| SLIT2 | Slit homolog 2 (Drosophila) | SLIL3, Slit-2 |
| SLITRK1 | SLIT and NTRK-like family, member 1 | UNQ233/PRO266, LRRC12, TTM |
| SLITRK2 | SLIT and NTRK-like family, member 2 | UNQ9197/PRO34756, CXorf2, SLITL1 |
| SLITRK3 | SLIT and NTRK-like family, member 3 | |
| SLK | STE20-like kinase | LOSK, STK2, bA16H23.1, se20-9 |
| SLMAP | Sarcolemma associated protein | UNQ1847/PRO3577, SLAP |
| SLN | Sarcolipin | |

| | | | |
|---------|--|---|---|
| SLTM | SAFB-like, transcription modulator | Met | |
| SLU7 | SLE7 splicing factor homolog (S. pneumoniae) | 9G8, hSlu7 | |
| SMA5 | Glucuronidase, beta pseudogene | | |
| SMAD2 | SMAD family member 2 | JV18, JV18-1, MADH2, MADR2, hMAD-2, hSMAD2 | |
| SMAD3 | SMAD family member 3 | HSPC193, HsT17436, JV15-2, LDS1C, LDS3, MADH3 | |
| SMAD5 | SMAD family member 5 | DWFC, JV5-1, MADH5 | |
| SMAD7 | SMAD family member 7 | CRCS3, MADH7, MADH8 | |
| SMAD9 | SMAD family member 9 | KIT11-42IT11.3, MADH9, MADH9, TTHZ, SMAD8, SMAD8A, SMAD9B | |
| SMAP1 | Small ArfGAP 1 | RP1-104A17.1, SMAP-1 | |
| SMARCA2 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin subfamily 2 | BAF170, BKM, NCBK3, SINTZ, SINTZ2, SINTZEA, SWI7-5, BAF170A, BAK1, MKD10, KIT5Z, SINTZ, SNE2L4, SNE2L5, SWI2, SNE2L | |
| SMARCA4 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin subfamily 4 | BAF170, BAF170A, BAK1, MKD10, KIT5Z, SINTZ, SNE2L4, SNE2L5, SWI2, SNE2L | √ |
| SMARCA1 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin subfamily 1 | ADERM, ETL1, HEL1 | |
| SMARCC2 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin subfamily 2 | BAF170, CRACC2, Rsc8 | |
| SMARCD1 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin subfamily 1 | BAF60A, CRACD1, Rsc6p | |
| SMARCD3 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin subfamily 3 | BAF60C, CRACD3, Rsc6p | |
| SMARCE1 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin subfamily 1 | BAF57 | √ |
| SMC1A | Structural maintenance of chromosomes 1A | KF0-29D12.1, CDLS2, DKS425E, SBT.8, SMC1, SMC1L1, SMC1L1b, SMC1B | |
| SMC2 | Structural maintenance of chromosomes 2 | PRO0324, CAP-E, CAPE, SMC-2L1, SMC2 | |
| SMC4 | Structural maintenance of chromosomes 4 | CAP-C, CAPC, SMC-4L1, hCAP-C, SMC4 | |
| SMC6 | Structural maintenance of chromosomes 6 | SMC-6L1, hSMC6, SMC6 | |
| SMCHD1 | Structural maintenance of chromosomes 1 | | |
| SMCR7 | Smith-Rigden's syndrome chromosome region, candidate 7 | | |
| SMCR7L | Smith-Rigden's syndrome chromosome region, candidate 7L | | |
| SMCR8 | Smith-Rigden's syndrome chromosome region, candidate 8 | | |
| SMEK1 | SMEK homolog 1, suppressor of mek1 | MSTP033, FLFL1, KIAA2010, PP4R3A, smk-1, smk1 | |
| SMEK2 | SMEK homolog 2, suppressor of mek1 | FLFL2, PP4R3B, PSY2, smk1 | |
| SMG1 | SMG1 phosphatidylinositol 3-kinase-related | 61E3.4, ATX, LIP | |
| SMG6 | SMG6 nonsense mediated mRNA decay factor | C17orf31, EST1A, SMG-6, hSMG5/7a | |
| SMG7 | SMG7 nonsense mediated mRNA decay factor | RP1-127C7.1, C1orf16, EST1C, SGA56M | |
| SMN2 | Survival of motor neuron 2, centromeric | BCD541, C-BCD541, GEMIN1, SMNC, TDRD16B | |
| SMNDC1 | Survival motor neuron domain containing 1 | SMNR, SPF30, TDRD16C | |
| SMPDL3A | Sphingomyelin phosphodiesterase, acid-like 3A | ASM3A, ASML3a, yR36GH4.1 | |
| SMS | Spermine synthase | MRSR, SPMSY, SRS, SpS | |

| | | | |
|-------------|--|--|--|
| SMTN | Smoothelin | | |
| SMU1 | Smu-1 suppressor of mec-8 and unc-52 | RP11-54K16.3, BWD, SMU-1, fSAP57 | |
| SMUG1 | Single-strand-selective monofunctional small DNA glycosylase 1 | FDG, HMUDG, UNG3 | |
| SMURF1 | SMAD specific E3 ubiquitin protein ligase 1 | | |
| SMYD1 | SET and MYND domain containing 1 | BOP, KMT3D, ZMYND18, ZMYND22 | |
| SMYD2 | SET and MYND domain containing 2 | RP11-176D17.2, HSKM-B, KMT3C, ZMYND14 | |
| SNAI2 | Snail family zinc finger 2 | SLUG, SLUGH1, SNAIL2, WS2D | |
| SNAP25 | Synaptosomal-associated protein, 25 kDa | KIC-4, KIC4, SEC7, SINAI, SINAI-2, UA410N4.2, HUG8E16.2 | |
| SNAP47 | Synaptosomal-associated protein, 47 kDa | RP5-870F10.2, C1orf142, HEL170, SNAP-47, SVAP1 | |
| SNAPC1 | Small nuclear RNA activating complex, alpha 1 | PTFgamma, SNAP43 | |
| SNAPC3 | Small nuclear RNA activating complex, alpha 3 | RP11-307K19.1, PTFbeta, SNAP50 | |
| SNCA | Synuclein, alpha (A4 component of amyloid precursor) | NACP, PARK1, PARK4, PD1 | |
| SNCAIP | Synuclein, alpha interacting protein | SYPH1, Sph1 | |
| SNED1 | Sushi, nidogen and EGF-like domains 1 | SST3, Snep | |
| SNF8 | SNF8, ESCRT-II complex subunit | Dot3, EAP30, VPS22 | |
| SNIP1 | Smad nuclear interacting protein 1 | RP3-423B22.3, PMRED | |
| SNN | Stannin | | |
| SNORA13 | Small nucleolar RNA, H/ACA box 13 | | |
| SNORA60 | Small nucleolar RNA, H/ACA box 60 | | |
| SNORA74B | Small nucleolar RNA, H/ACA box 74B | | |
| SNORD108 | Small nucleolar RNA, C/D box 108 | | |
| SNORD116-12 | Small nucleolar RNA, C/D box 116-12 | | |
| SNORD116-21 | Small nucleolar RNA, C/D box 116-21 | | |
| SNORD19B | Small nucleolar RNA, C/D box 19B | | |
| SNORD56B | Small nucleolar RNA, C/D box 56B | | |
| SNORD94 | Small nucleolar RNA, C/D box 94 | | |
| SNRNP200 | Small nuclear ribonucleoprotein 200 kDa (U15) | ASCC3L1, BRR2, HELIC2, RP33, U5-200KD | |
| SNRNP27 | Small nuclear ribonucleoprotein 27 kDa (U17/U15) | 27K, RY1 | |
| SNRNP48 | Small nuclear ribonucleoprotein 48 kDa (U11/U12) | RP3-336K20__B.1, C6orf151, dJ336K20B.1, dJ512B11.2 | |
| SNRPE | Small nuclear ribonucleoprotein polypeptide E | B-raf, HYPT11, SME, Sm-E | |
| SNRPN | Small nuclear ribonucleoprotein polypeptide N | HCKER3, FWCK, KI-EL, SIM-D, SIMN, SIMN1-IN, SMURF, SNBP, SNTN, DAFATB, SNT2, SNT2B1, TR-42 | |
| SNTB1 | Syntrophin, beta 1 (dystrophin-associated protein 1, 50 kDa, beta component 1) | | |
| SNTB2 | Syntrophin, beta 2 (dystrophin-associated protein 1, 50 kDa, beta component 2) | D16S2531E, EST25263, SNT2B2, SNT3, SNTL | |

| | | | |
|--------|--|---|--|
| SNTG1 | Syntrophin, gamma 1 | G1SYN, SYN4 | |
| SNTN | Sentan, cilia apical structure protein | S100A1L, S100AL, sentan | |
| SNX1 | Sorting nexin 1 | HsT17379, VPS5 | |
| SNX13 | Sorting nexin 13 | RGS-PX1 | |
| SNX21 | Sorting nexin family member 21 | RP3-337O18.7, C20orf161, PP3993, SNX-L, dJ337O18.4 | |
| SNX22 | Sorting nexin 22 | | |
| SNX27 | Sorting nexin family member 27 | RP11-98D18.12-005, MRT1, MY014 | |
| SNX29 | Sorting nexin 29 | A-388D4.1, RUNDC2A | |
| SNX30 | Sorting nexin family member 30 | RP11-408O19.4, ATG24A | |
| SNX31 | Sorting nexin 31 | | |
| SNX32 | Sorting nexin 32 | SNX6B | |
| SNX33 | Sorting nexin 33 | SH3PX3, SH3PXD3C, SNX30 | |
| SNX4 | Sorting nexin 4 | ATG24B | |
| SNX5 | Sorting nexin 5 | RP11-504H3.2 | |
| SNX6 | Sorting nexin 6 | MSTP010, TFAF2 | |
| SNX9 | Sorting nexin 9 | RP11-200C7.10-001, SDF1, SDF1A1, SDF1AD3A, WSP | |
| SOAT1 | Sterol O-acyltransferase 1 | RP11-215J23.1, ACAC1, ACAT, ACAT-1, ACAT1, COAT, STAT | |
| SOAT2 | Sterol O-acyltransferase 2 | ACACT2, ACAT2, ARGP2 | |
| SOBP | Sine ocans binding protein homolog (Drosophila) | RP1-47M23.2, JXC1, MRAMS | |
| SOCS2 | Suppressor of cytokine signaling 2 | CIS2, Cish2, SOCS-2, SSI-2, SSI2, STAT2 | |
| SOCS3 | Suppressor of cytokine signaling 3 | ATOD4, CIS3, Cish3, SOCS-3, SSI-3, SSI3 | |
| SOCS4 | Suppressor of cytokine signaling 4 | SOCS7 | |
| SOCS5 | Suppressor of cytokine signaling 5 | CIS6, CISH6, Cish5, SOCS-5 | |
| SOCS6 | Suppressor of cytokine signaling 6 | CIS-4, CIS4, HSPC000, SOCS-4, SOCS-0, SOCS4, SSI4, STAT4, STAT4 | |
| SOD2 | Superoxide dismutase 2, mitochondrial | RP1-56L9.2, IPOB, MNSOD, MVCD6 | |
| SOD3 | Superoxide dismutase 3, extracellular | EC-SOD | |
| SON | SON DNA binding protein | HSPC310, BASS1, C21orf50, DBP-5, NREBP3, SON | |
| SORBS2 | Sorbin and SH3 domain containing 2 | ARGBP2, PRO0618 | |
| SORBS3 | Sorbin and SH3 domain containing 3 | SCAM-1, SCAM1, SH3D4 | |
| SORCS1 | Sorbin-related VPS10 domain containing | RP11-446H13.1, hSorCS | |
| SORCS3 | Sorbin-related VPS10 domain containing member 3 | RP11-107L7.1, SORCS | |
| SORD | Sorbitol dehydrogenase | HEL-S-95n1, SORD | |
| SORL1 | Sorbin-related receptor, L(DLK class) A repeats containing | C11orf32, LR11, LRP9, SORLA, SorLA-1, gp250 | |

| | | | |
|---------|---|--|--|
| SORT1 | Sortilin 1 | Gp95, LDLCQ6, NT3 | |
| SOS1 | Son of sevenless homolog 1 (Drosophila) | GF1, GGF1, GINGF, HGF, NS4 | |
| SOS2 | Son of sevenless homolog 2 (Drosophila) | | |
| SOSTDC1 | Sclerostin domain containing 1 | CDA019, ECTODIN, USAG1 | |
| SOX11 | SRY (sex determining region Y)-box 11 | MRD27 | |
| SOX13 | SRY (sex determining region Y)-box 13 | RP11-74C13.1, ICA12, Sox-13 | |
| SOX17 | SRY (sex determining region Y)-box 17 | VUR3 | |
| SOX21 | SRY (sex determining region Y)-box 21 | SOX25 | |
| SOX30 | SRY (sex determining region Y)-box 30 | | |
| SOX5 | SRY (sex determining region Y)-box 5 | RP11-444D3.1, L-SOX5, L-SOX5B, L-SOX5F | |
| SOX6 | SRY (sex determining region Y)-box 6 | HSSOX6, SOXD | |
| SOX7 | SRY (sex determining region Y)-box 7 | | |
| SOX9 | SRY (sex determining region Y)-box 9 | CMD1, CMPD1, SRA1 | |
| SP1 | Sp1 transcription factor | | |
| SP100 | SP100 nuclear antigen | lysp100b | |
| SP140 | SP140 nuclear body protein | LYSP100, LYSP100-A, LYSP100-B | |
| SP140L | SP140 nuclear body protein-like | | |
| SP3 | Sp3 transcription factor | SPR2 | |
| SP5 | Sp5 transcription factor | | |
| SP7 | Sp7 transcription factor | OI11, OI12, OSX, osterix | |
| SPACA1 | Sperm acrosome associated 1 | RP1-23D17.2, SAMP32 | |
| SPAG1 | Sperm associated antigen 1 | CILD28, CT140, HSD-3.8, SP75, TPIS | |
| SPAG11B | Sperm associated antigen 11B | EDDM2B, EP2, EP2C, EP2D, HE2, HE2C, SPAG11 | |
| SPAG16 | Sperm associated antigen 16 | PF20, WDR29 | |
| SPAG7 | Sperm associated antigen 7 | ACRP, FSA-1 | |
| SPAG9 | Sperm associated antigen 9 | HLC6, CT89, HLC-0, HLC4, JIF-4, JIF4, JLF1, FHL1, PIC6 | |
| SPATA1 | Spermatogenesis associated 1 | RP11-118B23.4, SP-2, SPAP1 | |
| SPATA18 | Spermatogenesis associated 18 | Mieap, SPETEX1 | |
| SPATA2 | Spermatogenesis associated 2 | PD1, PPP1R145, tamo | |
| SPATA20 | Spermatogenesis associated 20 | SSP411, Tisp78 | |
| SPATA22 | Spermatogenesis associated 22 | NYD-SP20, NYDSP20 | |
| SPATA4 | Spermatogenesis associated 4 | SPEF1B, TSARG2 | |
| SPATA5 | Spermatogenesis associated 5 | AFG2, SPAF | |

| | | | |
|---------|---|--|--|
| SPATA6 | Spermatogenesis associated 6 | RP11-252A4.1, HASH, SRF-1, SRF1 | |
| SPATS2 | Spermatogenesis associated, serine-rich 2 | Nbla00526, P59SCR, SCR59, SPATA10 | |
| SPATS2L | Spermatogenesis associated, serine-rich 2-like | SP1224, DNAPTP6, SGNP | |
| SPDYE1 | Speedy/KIF11G0 cell cycle regulator family member F1 | Ringo1, SPDYE, WBSCR19 | |
| SPDYE2 | Speedy/KIF11G0 cell cycle regulator family member F2 | | |
| SPDYE6 | Speedy/KIF11G0 cell cycle regulator family member F6 | hCG_1989182 | |
| SPDYE8P | Speedy/KIF11G0 cell cycle regulator family member F8, pseudogene | | |
| SPEF2 | Sperm flagellar 2 | CT122, KPL2 | |
| SPEG | SPEG complex locus | APEG-1, APEG1, BPEGalpha, SPEGbeta, SPEG | |
| SPG11 | Spastic paraplegia 11 (autosomal recessive) | KIAA1840 | |
| SPG20 | Spastic paraplegia 20 (Troyer syndrome) | SPARTIN, TAHCCP1 | |
| SPG21 | Spastic paraplegia 21 (autosomal recessive, Mearns syndrome) | BM-019, ACP33, GL010, MAST | |
| SPHK2 | Sphingosine kinase 2 | SK 2, SK-2, SPK 2, SPK-2 | |
| SPI1 | Spi-1 proto-oncogene | hCG_25181, OF, PU.1, SFPI1, SPI-1, SPI-A | |
| SPIN1 | Spindlin 1 | SPIN | |
| SPINK13 | Serine peptidase inhibitor, Kazal type 13 (mutative) | HBVDNAPTP1, HESPINTOR, LiESP6, SPINK5L3 | |
| SPINK4 | Serine peptidase inhibitor, Kazal type 4 | HEL136, PEC-60, PEC60 | |
| SPINK5 | Serine peptidase inhibitor, Kazal type 5 | LEKTI, LETKI, NETS, NS, VAKTI | |
| SPINLW1 | | | |
| SPIRE1 | Spire-type actin nucleation factor 1 | Spir-1 | |
| SPIRE2 | Spire-type actin nucleation factor 2 | Spir-2 | |
| SPOCK1 | Sparc/osteonectin, cwcv and kazal-type domain proteoglycan (testis) 1 | SPOCK, TESTICAN, TIC1 | |
| SPOCK3 | Sparc/osteonectin, cwcv and kazal-type domain proteoglycan (testis) 3 | UNQ409/PRO771, HSAJ1454, TES-3, TICN3 | |
| SPON1 | Spondin 1, extracellular matrix protein | VSGP/F-spondin, f-spondin | |
| SPOPL | Speckle-type POZ protein-like | BTBD33 | |
| SPP1 | Secreted phosphoprotein 1 | PSEC0156, BNSP, BSPI, ETA-1, OPN | |
| SPP2 | Secreted phosphoprotein 2, 24 kDa | SPP-244, SPP2 | |
| SPRN | Shadow of prion protein homolog (zebrafish) | SHADOO, SHO, ba108K14.1 | |
| SPRR1B | Small proline-rich protein 1B | CORNIFIN, GADD33, SPRR1 | |
| SPRY2 | Sprouty homolog 2 (Drosophila) | hSPRY2 | |
| SPRY4 | Sprouty homolog 4 (Drosophila) | HH17 | |
| SPRYD3 | SPRY domain containing 3 | | |
| SPSB1 | SpirA/ryanodine receptor domain and SOCS box-containing 1 | RP3-324M8.1, SSB-1, SSB1 | |

| | | | |
|---------|---|---|---|
| SPTA1 | Spectrin, alpha, erythrocytic 1 | EL2, HPP, HS3, SPH3, SPTA | |
| SPTBN1 | Spectrin, beta, non-erythrocytic 1 | ELF, HEL102, SPTB2, betaSpII | |
| SPTBN5 | Spectrin, beta, non-erythrocytic 5 | BSPECV, HUBSPECV, HUSPECV | |
| SPTLC1 | Serine palmitoyltransferase, long chain base | KP11-118F2.1, HSN1C, HSN1, LCB1, LCB2, SPT1, SPTL | |
| SPTLC2 | Serine palmitoyltransferase, long chain base | HSN1C, LCB2, LCB2A, NSAN1C, SPT2, hLCB2a | |
| SPTLC3 | Serine palmitoyltransferase, long chain base | KP3-107712.1, C200H36, LCB2B, LCB3, SPT3, SPTLC3L, J1719D11, J1719D11.1, hLCB2b | |
| SPTY2D1 | SP12, Suppressor of Ty, domain containing 1 (S. pombe) | | |
| SR140 | | | |
| SRCAP | Snf2-related CREBBP activator protein | DOMO1, EAF1, FLHS, SWR1 | |
| SRCIN1 | SRC kinase signaling inhibitor 1 | P140, SNIP | |
| SRD5A1 | Steroid-5-alpha-reductase, alpha polypeptide | S5AR 1 | |
| SREBF2 | Steroid regulatory element binding factor 2 | CTA-250D10.14-005, SREBP-2, SREBP2, bHLHd2 | |
| SRF | Serum response factor (c-fos serum response element binding transcription factor) | MCM1 | |
| SRFBP1 | Serum response factor binding protein 1 | BUD22, P49, Rlb1, STRAP, p49/STRAP | |
| SRGAP1 | SEIT-KODD KIB GTPase activating protein 1 | ARHGAP13 | |
| SRGAP2 | SEIT-KODD KIB GTPase activating protein 2 | KP11-31207.2, ARHGAP34, FNBP2A, SRGAP3, SRGAP2 | |
| SRGAP3 | SEIT-KODD KIB GTPase activating protein 3 | ARHGAP14, MEGAP, SRGAP2, WRP | √ |
| SRGN | Serglycin | PPG, PRG, PRG1 | |
| SRI | Sorcin | CP-22, CP22, SCN, V19 | |
| SRPK1 | SRSF protein kinase 1 | RP3-422H11.1, SFRSK1 | |
| SRPK2 | SRSF protein kinase 2 | SFRSK2 | |
| SRPR | Signal recognition particle receptor (docking protein) | | |
| SRR | Serine racemase | ILV1, ISO1 | |
| SRRM1 | Serine/arginine repetitive matrix 1 | 160-KD, POP101, SRM160 | |
| SRRM4 | Serine/arginine repetitive matrix 4 | KIAA1853, MU-MB-2.76, nSR100 | |
| SS18L1 | Synovial sarcoma translocation gene on chromosome 18 like 1 | RP5-1005F21.1, CREST, LP2261 | √ |
| SS18L2 | Synovial sarcoma translocation gene on chromosome 18 like 2 | KIAA-iso | |
| SSB | Sjogren syndrome antigen B (autoantigen) | LARP3, La, La/SSB | |
| SSBP1 | Single-stranded DNA binding protein 1, mitochondrial | Mt-SSB, SOSS-B1, SSBP, mtSSB | |
| SSBP2 | Single-stranded DNA binding protein 2 | HSPC116, SOSS-B2 | |
| SSFA2 | Sperm specific antigen 2 | CS-1, CS1, KRAP, SPAG13 | |
| SSH2 | Slingshot protein phosphatase 2 | SSH-2, SSH-2L | |
| SSPN | Sarcospan | DAGA5, KRAG, NSPN, SPN1, SPN2 | |

| | | | |
|------------|--|---|---|
| SSR1 | Signal sequence receptor, alpha | PSEC0262, TRAPA | |
| SSR2 | Signal sequence receptor, beta (transmembrane protein) | HSD25, TLAP, TRAP-BETA, TRAPB | |
| SSR3 | Signal sequence receptor, gamma (transmembrane protein associated protein gamma) | TRAPG | |
| SSTR2 | Somatostatin receptor 2 | | |
| SSX2IP | Synovial sarcoma, X breakpoint 2 interacting protein | ADIP | |
| SSX9 | Synovial sarcoma, X breakpoint 9 | RP11-344N17.10-001 | |
| ST3GAL1 | ST3 beta-galactosidase alpha-2,3- | Gal-NAC6S, SIAT4A, SIAT1L, ST3GalA, ST3GalA.1, ST2G-IIA, ST2G-IIA.1, ST2G | |
| ST3GAL3 | ST3 beta-galactosidase alpha-2,3- | EIEE15, MRT12, SIAT6, ST3GALII, ST3GalIII, ST3N | |
| ST6GAL2 | ST6 beta-galactosaminidase alpha-2,6- | SIAT2, ST6GalII | |
| ST6GALNAC3 | ST6 (alpha-N-acetylneuraminyl-2,3-beta-D-glucosyl-1,2)-N-acetylglucosaminidase | UNQ2787/PRO1111, PRO1111, SIAT7C, ST6GALNACIII, STX | |
| ST6GALNAC5 | ST6 (alpha-N-acetylneuraminyl-2,3-beta-D-glucosyl-1,2)-N-acetylglucosaminidase | RP4-564M11.3, SIAT7E, ST6GalNAcV | |
| ST7 | Suppression of tumorigenicity 7 | ETS7q, FAM4A, FAM4A1, HELG, RAY1, SEN4, TSG7 | |
| ST8SIA1 | ST8 alpha-N-acetylneuraminidase alpha-2,6- | GD3S, SIAT8, SIAT8-A, SIAT8A, ST8SiaI | |
| ST8SIA2 | ST8 alpha-N-acetylneuraminidase alpha-2,6- | UNQ3057, HsT19690, SIAT8B, ST8SIA-II, STX | |
| ST8SIA3 | ST8 alpha-N-acetylneuraminidase alpha-2,6- | SIAT8C, ST8SiaIII | |
| ST8SIA4 | ST8 alpha-N-acetylneuraminidase alpha-2,6- sialyltransferase 4 | PST, PST1, SIAT8D, ST8SIA-IV | |
| STAC2 | SH3 and cysteine rich domain 2 | 24b2, 24b2/STAC2 | |
| STAC3 | SH3 and cysteine rich domain 3 | NAM | |
| STAG1 | Stromal antigen 1 | SA1, SCC3A | |
| STAG3 | Stromal antigen 3 | | |
| STAG3L4 | Stromal antigen 3-like 4 (pseudogene) | STAG3L4P | |
| STAM2 | Signal transducing adaptor molecule (SH3 domain and ITAM motif) | HbpA, STAM2B, STAM2 | |
| STAMBPL1 | STAM binding protein-like 1 | ALMalpha, AMSH-FP, AMSH-LP, bA399O19.2 | |
| STARD13 | STARK-related lipid transfer (START) domain containing 13 | RP11-81F11.1, ARHGAP37, DLC2, GT650, LINC00464 | |
| STARD3 | STARK-related lipid transfer (START) domain containing 3 | CAB1, MLN64, es64 | |
| STARD3NL | STARD3 N-terminal like | UNQ855/PRO1864, MENTHO | |
| STARD4 | STARK-related lipid transfer (START) domain containing 4 | | |
| STARD8 | STARK-related lipid transfer (START) domain containing 8 | ARHGAP38, DLC3, STARTGAP3 | |
| STARD9 | STARK-related lipid transfer (START) domain containing 9 | | |
| STAT1 | Signal transducer and activator of transcription 1 | CAND17, IMD31A, IMD31B, IMD31C, ISGF-3, STAT1 | |
| STAT3 | Signal transducer and activator of transcription 3 | APRF, HIES | √ |
| STAT4 | Signal transducer and activator of transcription 4 | SLEB11 | |
| STAU1 | Staufen double-stranded RNA binding protein 1 | RP3-470L14.2, PPP1R150, STAU | |

| | | | |
|---------|--|---|--|
| STAU2 | Staufen double-stranded RNA binding protein 2 | | |
| STBD1 | Starch binding domain 1 | GENX-3414, GENEX3414 | |
| STC1 | Stanniocalcin 1 | STC | |
| STC2 | Stanniocalcin 2 | STC-2, STCRP | |
| STEAP2 | STEAP family member 2, metalloredutase | UNQ0507/TKO23205, IFCAT, FCANAF1, FUMFCU, STAMP1, STMP | |
| STEAP3 | STEAP family member 3, metalloredutase | AHMIO2, STMP3, TSAP6, dudlin-2 | |
| STEAP4 | STEAP family member 4 | STAMP2, TIARP, TNFAIP9 | |
| STELLAR | | | |
| STIM2 | Stromal interaction molecule 2 | | |
| STK10 | Serine/threonine kinase 10 | LOK, PRO2729 | |
| STK11IP | Serine/threonine kinase 11 interacting protein | LIP1, LKB1IP1, STK11IP | |
| STK16 | Serine/threonine kinase 16 | KRCT, MPSK, PKL12, TSF1 | |
| STK17A | Serine/threonine kinase 17a | DRAK1 | |
| STK17B | Serine/threonine kinase 17b | DRAK2 | |
| STK24 | Serine/threonine kinase 24 | KP11-111E24.5, HEL-3-95, MST3, MST3B, STE20, STK2 | |
| STK25 | Serine/threonine kinase 25 | SOK1, YSK1 | |
| STK32A | Serine/threonine kinase 32A | YANK1 | |
| STK32C | Serine/threonine kinase 32C | RP11-140A10.1, PKE, YANK3 | |
| STK38 | Serine/threonine kinase 38 | NDR, NDR1 | |
| STK38L | Serine/threonine kinase 38 like | NDR2 | |
| STK39 | Serine threonine kinase 39 | DCHT, PASK, SPAK | |
| STK4 | Serine/threonine kinase 4 | KRS2, MST1, TIAC, YSK3 | |
| STMN1 | Stathmin 1 | KP11-125B.5, C10H215, LAP16, Lag, OT16, P117, P119, PR22, SMN | |
| STMN2 | Stathmin 2 | SCG10, SCGN10 | |
| STOM | Stomatin | RP11-342H3.1, BND7, EPB7, EPB72 | |
| STOML3 | Stomatin (EPB72)-like 3 | RP11-50D16.1, Epb7.2l, SRO | |
| STON1 | Stonin 1 | SALF, SBLF, STN1, STNB1 | |
| STON2 | Stonin 2 | STN2, STNB, STNB2 | |
| STOX1 | Storkhead box 1 | RP11-314J18.7, C10orf24, PEE4 | |
| STOX2 | Storkhead box 2 | | |
| STRBP | Spermatid perinuclear RNA binding protein | HEL162, ILF3L, SPNR, p74 | |
| STRN3 | Striatin, calmodulin binding protein 3 | SG2NA | |
| STS | Steroid sulfatase (microsomal), isozyme S | ARSC, ARSC1, ASC, ES, SSDD, XLI | |

| | | | |
|---------|---|--|---|
| STT3A | STT3A, subunit of the | ITM1, STT3-A, TMC | |
| STUB1 | STUB1 homology and C-box containing | LATOC-STUB1.0, CHH1, HSPADP2, NF-CO-1, SCAR10, | |
| STX11 | Syntaxin 11 | SDGCAG7, UBOY1 | |
| STX12 | Syntaxin 12 | FHL4, HLH4, HPLH4 | |
| STX16 | Syntaxin 16 | RP3-426I6.4, STX13, STX14 | |
| STX17 | Syntaxin 17 | RP11-261P9.3, SYN16 | |
| STX1B | Syntaxin 1B | STX1B12, STX1B | |
| STX2 | Syntaxin 2 | EPIM, EPMA, STX2B, STX2C, STX2 | |
| STX3 | Syntaxin 3 | STX3A | |
| STX6 | Syntaxin 6 | | |
| STX7 | Syntaxin 7 | RP11-560I21.1 | |
| STXBP3 | Syntaxin binding protein 3 | MUNC18-3, MUNC18C, PSP, UNC-18C | |
| STXBP4 | Syntaxin binding protein 4 | Synip | |
| STXBP5 | Syntaxin binding protein 5 (tomosyn) | RP11-361F15.2, LGL3, LLGL3, Nbla04300 | |
| STXBP5L | Syntaxin binding protein 5-like | LLGL4 | |
| STYK1 | Serine/threonine/tyrosine kinase 1 | NOK, SuRTK106 | |
| STYX | Serine/threonine/tyrosine interacting protein | | |
| SUB1 | SUB1 homolog (<i>S. cerevisiae</i>) | P15, PC4, p14 | |
| SUCLA2 | Succinate-CoA ligase, ADP-forming, beta | RP11-528D24.2, A-BETA, MTDPS5, SCS-betaA | |
| SUCLG2 | Succinate-CoA ligase, GDP-forming, beta | GBETA | |
| SUCNR1 | Succinate receptor 1 | GPR91 | |
| SUDS3 | Suppressor of defective silencing 3 homolog | SAP45, SDS3 | |
| SUFU | Suppressor of fused homolog (<i>Drosophila</i>) | RP11-47A8.1, PRO1280H, SUFUXL, SUFU | √ |
| SUGT1 | SGT1, suppressor of G2 allele of SKI1 (<i>S.</i> | RP11-93H24.2, SGT1 | |
| SULF1 | Sulfatase 1 | HSULF-1, SULF-1 | |
| SULT1C2 | Sulfotransferase family, cytosolic, 1C, | ST1C1, ST1C2, SULT1C1, humSULTC2 | |
| SULT1C4 | Sulfotransferase family, cytosolic, 1C, | SULT1C, SULT1C2 | |
| SULT4A1 | Sulfotransferase family 4A, member 1 | BR-SULF1, BRSTL1, DJ388M3.3, NS1, SULTA3, HBR- | |
| SUMF1 | Sulfatase modifying factor 1 | UNQ3037, AAPA3037, FGE | |
| SUMF2 | Sulfatase modifying factor 2 | PSEC0171, Pfgc | |
| SUMO3 | small ubiquitin-like modifier 3 | SMT3A, SMT3H1, SUMO-3, Smt3B | |
| SUPT3H | Suppressor of Ty 3 homolog (<i>S. cerevisiae</i>) | RP11-169I2.1, SPT3, SPT3L | |
| SUPT7L | Suppressor of Ty 7 (<i>S. cerevisiae</i>)-like | SPT7L, STAF65, STAF65(gamma), STAF65G, SUPT7H | |

| | | | |
|----------|--|---|---|
| SUSD4 | Sushi domain containing 4 | RP11-239E10.4, PRO222 | |
| SUSD5 | Sushi domain containing 5 | Gm1126 | |
| SUV39H1 | Suppressor of variegation 3-9 homolog 1 | H3-K9-HMTase 1, KMT1A, MG44, SUV39H | |
| SUV420H1 | Suppressor of variegation 4-20 homolog 1 | CGI-85, CGI85, KMT5B | |
| SUZ12 | SUZ12 polycomb repressive complex 2 | CHET9, JJAZ1 | √ |
| SUZ12P | Suppressor of zeste 12 homolog pseudogene 1 | SUZ12P | |
| SV2A | Synaptic vesicle glycoprotein 2A | PSEC0174, SV2 | |
| SV2B | Synaptic vesicle glycoprotein 2B | HsT19680 | |
| SVIP | Small VCP/p97-interacting protein | | |
| SWAP70 | SWAP switching D-cell complex 70 kDa subunit | HSPC321, SWAP-70 | |
| SYCP1 | Synaptonemal complex protein 1 | RP11-109G4.1, CT8, HOM-TE5-14, SCP-1, SCP1 | |
| SYCP2 | Synaptonemal complex protein 2 | RP5-884F15.1, SCP2 | |
| SYF2 | SYF2 pre-mRNA-splicing factor | CBPIN, NTC31, P29, fSAP29 | |
| SYK | Spleen tyrosine kinase | p72-Syk | √ |
| SYN2 | Synapsin II | SYNII | |
| SYNC | Syncoilin, intermediate filament protein | SYNC1OILIN, SYNC | |
| SYNCRIP | Synaptotagmin binding, cytoplasmic RNA | RP11-5317.2, GKT-RDI, GKT-RDI, HINKR1Q, HINKR1Q1, | |
| SYNE1 | Spectrin repeat containing, nuclear envelope | NS1-P50E4.2, db, NRC-A1, COO198, CUG2, EDMD4, | |
| SYNE2 | Spectrin repeat containing, nuclear envelope | EDMD3, NCA1, NCANL, H45H2, Nesprin-2, SYNE-2, | |
| SYNJ1 | Synaptojanin 1 | INPP5G, PARK20 | |
| SYNJ2BP | Synaptojanin 2 binding protein | ARIP2, OMP25 | |
| SYNM | Synemin, intermediate filament protein | DMN, SYN | |
| SYNPO2 | Synaptopodin 2 | | |
| SYNPO2L | Synaptopodin 2-like | | |
| SYNPR | Synaptoporin | SPO | |
| SYNRG | synergin, gamma | AP1GBP1, SYNG | |
| SYPL1 | Synaptophysin-like 1 | H-SP1, SYPL | |
| SYPL2 | Synaptophysin-like 2 | UNQ6348, MG29 | |
| SYT1 | Synaptotagmin I | P65, SVP65, SYT | |
| SYT14 | Synaptotagmin XIV | SCAR11, sytXIV | |
| SYT15 | Synaptotagmin XV | RP11-38L15.7, CHR10SYT, sytXV | |
| SYT16 | Synaptotagmin XVI | CHR14SYT, SYT14L, Strep14, syt14r, yt14r | |
| SYT2 | Synaptotagmin II | SytII | |

| | | | |
|--------|--|---|---|
| SYT3 | Synaptotagmin III | SytIII | |
| SYT4 | Synaptotagmin IV | HsT1192 | |
| SYT7 | Synaptotagmin VII | IPCA-7, IPCA7, PCANAP7, SYT-VII, SYTVII | |
| SYTL2 | Synaptotagmin-like 2 | CHR11SYT, EXO4, PPP1R151, SGA72M, SLP2, SLP2A | |
| SYTL4 | Synaptotagmin-like 4 | RP11-524D16__A.2, SLP4 | |
| T | T, brachyury homolog (mouse) | RP11-459F1.1, SAVAF1, T | |
| TAB1 | TGF-beta activated kinase 1/MAF3K7 | RP3-407F17.2, 3'-Tab1, MAP3K7IP1 | |
| TAB2 | TGF-beta activated kinase 1/MAF3K7 | RP1-111D6.3, CHTD2, MAP3K7IP2, TAB-2 | |
| TAB3 | TGF-beta activated kinase 1/MAF3K7 | MAP3K7IP3, NAP1 | |
| TACC1 | transforming, acidic coiled-coil containing protein 2 | Ga55 | |
| TACC2 | transforming, acidic coiled-coil containing protein 2 | RP11-296H2.1, AZU-1, ECTACC | |
| TACR1 | Tachykinin receptor 1 | NK1R, NKIR, SPR, TAC1R | |
| TADA1 | Transcriptional adaptor 1 | RP1-9E21.4, ADA1, HF11, STAF42L, hADA1, TADA1 | |
| TADA2A | Transcriptional adaptor 2A | KL04P, ADA2, ADA2A, TADA2L, hADA2 | |
| TADA2B | Transcriptional adaptor 2B | ADA2(beta), ADA2B | |
| TAF15 | TAF15 RNA polymerase II, TATA box | Npl3, RBP56, TAF2N, TAFII68 | v |
| TAF1A | TATA box binding protein (TBP)-associated factor 1A | RP11-378J18.2, MGC:17061, RAFI48, SL1, TAFI48 | |
| TAF1D | TATA box binding protein (TBP)-associated factor 2 RNA polymerase II, TATA box | JOSD3, RAFI41, TAF(D)41, TAFI41 | |
| TAF2 | TAF2 RNA polymerase II, TATA box | CIF150, MRT40B, TAFIII150, TAF2 | |
| TAF4 | TAF4 RNA polymerase II, TATA box | K15-1107C24.1, TAF2C, TAF2CIA, TAFIII50, | |
| TAF4B | TAF4 RNA polymerase II, TATA box | TAFII125, TAF4 | |
| TAF5 | TAF5 RNA polymerase II, TATA box | SPGF13, TAF2C2, TAFIII105 | |
| TAF5L | TAF5-like RNA polymerase II, p500/CBF1 | TAF2D, TAFII100 | |
| TAF7 | TAF7 RNA polymerase II, TATA box | RP4-613A2.4, PAF65B | |
| TAF8 | TAF8 RNA polymerase II, TATA box | TAF2F, TAFII55 | |
| TAF9 | TAF9 RNA polymerase II, TATA box | 43, II, TAF, TAFII-43, TAFII43, TBN | |
| TAF9B | TAF9B RNA polymerase II, TATA box | AD-004, MGC:5007, STAF51/52, TAF2G, TAFII-51, | |
| TAF9B | TAF9B RNA polymerase II, TATA box | TAFII-22, TAFII31, TAFII23, TAFII23, | |
| TAF9B | TAF9B RNA polymerase II, TATA box | RP4-576LT2.2, DN-7, DN7, TAF9E, TAFII51E, ITID- | |
| TAGAP | T-cell activation (TRD) kinase activating protein | FKSG15, ARHGAP47, IDDM211, TAGAP | |
| TAGLN2 | Transgelin 2 | RP11-48O20.1, HA1756 | |
| TAGLN3 | Transgelin 3 | NP22, NP24, NP25 | |
| TAL2 | T-cell acute lymphocytic leukemia 2 | | v |
| TALDO1 | Transaldolase 1 | TAL, TAL-H, TALDOR, TALH | |
| TANC1 | tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 1 | ROLSB, TANC | |

| | | | |
|----------|---|---|---|
| TANC2 | Tetraucopptide repeat, ankyrin repeat and transporter 1, ATP-binding cassette, sub-family D (MDR/TAP) | ROLSA, rols | |
| TAP1 | Transporter 1, ATP-binding cassette, sub-family D (MDR/TAP) | DAAF-57C1.3, ADC17, ADCB2, APT1, D0S114E, FST-1, PSF1, PING4*0102N, TAD1N, TAP1 | |
| TAP2 | Transporter 2, ATP-binding cassette, sub-family D (MDR/TAP) | DAAF-57C1.2, ADC18, ADCB3, APT2, D0S217E, FST-2, PSF2, PING11 | |
| TAPT1 | Transmembrane anterior posterior transformation 1 | CMVFR | |
| TARDBP | TAR DNA binding protein | RP4-635E18.2, ALS10, TDP-43 | |
| TAS2R20 | Taste receptor, type 2, member 20 | T2R20, T2R49, T2R56, TAS2R49 | |
| TATDN3 | TatD DNase domain containing 3 | | |
| TAX1BP3 | TAX1 (human T-cell leukemia virus type 1) TBC1 (tre-2/0318, DDB2, cdc16) domain family, member 1 | TIP-1 | |
| TBC1D1 | TBC1 domain family, member 1 | TBC, TBC1 | |
| TBC1D13 | TBC1 domain family, member 13 | RP11-545E17.5 | |
| TBC1D14 | TBC1 domain family, member 14 | | |
| TBC1D15 | TBC1 domain family, member 15 | RAB7-GAP | |
| TBC1D20 | TBC1 domain family, member 20 | RP5-852M4.5, C20orf140, WARBM4 | |
| TBC1D22B | TBC1 domain family, member 22B | RP4-744I24.2, C6orf197, dJ744I24.2 | |
| TBC1D26 | TBC1 domain family, member 26 | | |
| TBC1D2B | TBC1 domain family, member 2B | | |
| TBC1D3 | TBC1 domain family, member 3 | | |
| TBC1D30 | PRC17A, TBC1D3F, TBC1D3 | | |
| TBC1D4 | TBC1 domain family, member 4 | RP11-159J2.3, AS160 | |
| TBC1D5 | TBC1 domain family, member 5 | | |
| TBC1D7 | TBC1 domain family, member 7 | HSPC239, MGCPH, PIG51, TBC7 | |
| TBC1D8B | TBC1 domain family, member 8B (with TBC1 domain family, member 9 (with GRAM domain)) | RP11-321G1.1 | |
| TBC1D9 | TBC1 domain family, member 9 (with GRAM domain) | MDR1 | |
| TBCA | Tubulin folding cofactor A | | |
| TBCD | Tubulin folding cofactor D | PP1096, SSD-1, tfcD | |
| TBCEL | Tubulin folding cofactor E-like | E1, LRRC35 | |
| TBCK | TBC1 domain containing kinase | HSPC302L, TBCK | |
| TBL1X | Transducin (beta)-like 1X-linked | EBI, SMAP55, TBL1 | |
| TBL1XR1 | Transducin (beta)-like 1 X-linked receptor 1 | C21, DC42, IRA1, TBLR1 | √ |
| TBL2 | Transducin (beta)-like 2 | UNQ563/PRO1125, WBSCR13, WS-betaTRP | |
| TBP | TATA box binding protein | RP1-191N21.3, GTF2D, GTF2D1, HDL4, SCA17, TFIID | |
| TBPL1 | TBP-like 1 | RP1-75H22.1, MGC:8589, MGC:9020, STOD, TBL, TBL, TBE2 | |
| TBRG1 | Transforming growth factor beta regulator 1 | NIAM, TB-5 | |

| | | | |
|--------|--|--|---|
| TBX18 | T-box 18 | | |
| TBX2 | T-box 2 | | |
| TBX3 | T-box 3 | TBX3-ISO, UMS, XHL | |
| TBX4 | T-box 4 | SPS | |
| TBX5 | T-box 5 | HOS | |
| TBXA2R | Thromboxane A2 receptor | BDPLT13, TXA2-R | |
| TCAM1P | Testicular cell adhesion molecule 1, pseudogene | TCAM1 | |
| TCEA2 | Transcription elongation factor A (SII), 2 | RP11-299N6.2, TFIIS | |
| TCEANC | Transcription elongation factor A (SII) N-terminal and central domain containing | | |
| TCERG1 | Transcription elongation regulator 1 | CA150, TAF2S, Urn1 | |
| TCF19 | Transcription factor 19 | DAMA-213L4.5, SC1, TCF-19 | |
| TCF4 | Transcription factor 4 | EZF2, HIF2, HIF2, TFIIS, SET2, SET2, SET2-1, SET2-1A, SET2-1B, SET2-1D, TCF4, HHLH10 | |
| TCF7L2 | Transcription factor 7-like 2 (T-cell specific, HMG) | RP11-357H24.1, TCF-4, TCF4 | v |
| TCFL5 | Transcription factor-like 5 (basic helix-loop-helix) | CHA, E2BP-1, Figlb, bHLHe82 | |
| TCHH | Trichohyalin | RP11-107M16.3, THH, THL, TRHY | |
| TCHP | Trichoplein, keratin filament binding | TpMs | |
| TCL6 | T-cell leukemia/lymphoma 6 (non-protein coding) | TNG1, TNG2 | v |
| TCTA | T-cell leukemia translocation altered | | |
| TCTN1 | Tectonic family member 1 | UNQ9369/PRO34160, JBTS13, TECT1 | |
| TCTN3 | Tectonic family member 3 | RP11-7D5.3, C10orf61, JBTS18, OFD4, TECT3 | |
| TDGF3 | Teratocarcinoma-derived growth factor 1 pseudogene 2 | CK-5, CNP10, CNP10-3, CNP10S, TDGF1, TDGF2, TDGF3 | |
| TDH | L-threonine dehydrogenase (pseudogene) | SDR14E1P | |
| TDRD1 | Tudor domain containing 1 | CT41.1 | |
| TDRD12 | Tudor domain containing 12 | ECAT8 | |
| TDRD9 | Tudor domain containing 9 | C14orf75, HIG-1, NET54 | |
| TDRG1 | Testis development related 1 (non-protein coding) | | |
| TEAD1 | TEA domain family member 1 (SV40 transcriptional enhancer factor) | AA, NTEF-1, REF1, TCF-13, TCF13, TEAD-1, TEF-1 | |
| TECPR1 | Tectonin beta-propeller repeat containing 1 | tcag7.876 | |
| TECRL | Trans-2,3-enoyl-CoA reductase-like | GPSN2L, SRD5A2L2, TERL | |
| TEF | Thyrotrophic embryonic factor | CTA-223H9.6 | |
| TEK | TEK tyrosine kinase, endothelial | CD202B, TIE-2, TIE2, VMCM, VMCM1 | |
| TEKT2 | Tektin 2 (testicular) | TEKTB1, TEK TIN-T, h-tektin-t | |
| TENC1 | Tensin like C1 domain containing chondron (tensin 2) | C1-TEN, C1TEN, TNS2 | |

| | | | |
|----------|--|--|---|
| TEPP | Testis, prostate and placenta expressed | | |
| TES | Testis derived transcript (3 LIM domains) | TESSS-2, TES | |
| TET2 | Tet methylcytosine dioxygenase 2 | Nbla00191, KIAA1546, MDS | √ |
| TET3 | Tet methylcytosine dioxygenase 3 | hCG_40738 | √ |
| TEX2 | Testis expressed 2 | HT008, TMEM96 | |
| TEX261 | Testis expressed 261 | UNQ1882/PRO4325, TEG-261 | |
| TEX9 | Testis expressed 9 | | |
| TFAP2A | Transcription factor AP-2 alpha (activating transcription factor AP-2 beta (activating enhancer-binding protein 2 beta)) | RP1-290I10.1, AP-2, AP-2alpha, AP2TF, BOFS, TFAP2 | |
| TFAP2B | Transcription factor AP-2 beta (activating enhancer-binding protein 2 beta) | RP4-753D5.1, AP-2B, AP2-B | |
| TFCP2L1 | Transcription factor CP2-like 1 | CRTR1, LBP-9, LBP9 | |
| TFDP1 | Transcription factor Dp-1 | RP11-230F18.1, DP1, DRTF1, Dp-1 | |
| TFEC | Transcription factor EC | TCFEC, TFE-C-L, TFECL, bHLHe34, hTFEC-L, TFEC | |
| TFPI | Tissue factor pathway inhibitor (inoprotein-associated coagulation inhibitor) | EPI, LACI, TFII, TFPI | |
| TFRC | Transferrin receptor | CD71, T9, TFR, TFR1, TR, TRFR, p90 | √ |
| TGDS | TDP-glucose 4,6-dehydratase | RP11-124B17.2, SDR2E1, TDPGD | |
| TGFA | Transforming growth factor, alpha | TFGA | |
| TGFB2 | Transforming growth factor, beta 2 | LDS4, TGF-beta2 | |
| TGFB1 | Transforming growth factor, beta-induced, (8/14 LDs) | BIGHS, CDB1, CDG2, CDG1, CSD, CSD1, CSD2, CSD3, CSD4, CSD5, CSD6, CSD7, CSD8, CSD9, CSD10, CSD11, CSD12, CSD13, CSD14, CSD15, CSD16, CSD17, CSD18, CSD19, CSD20, CSD21, CSD22, CSD23, CSD24, CSD25, CSD26, CSD27, CSD28, CSD29, CSD30, CSD31, CSD32, CSD33, CSD34, CSD35, CSD36, CSD37, CSD38, CSD39, CSD40, CSD41, CSD42, CSD43, CSD44, CSD45, CSD46, CSD47, CSD48, CSD49, CSD50, CSD51, CSD52, CSD53, CSD54, CSD55, CSD56, CSD57, CSD58, CSD59, CSD60, CSD61, CSD62, CSD63, CSD64, CSD65, CSD66, CSD67, CSD68, CSD69, CSD70, CSD71, CSD72, CSD73, CSD74, CSD75, CSD76, CSD77, CSD78, CSD79, CSD80, CSD81, CSD82, CSD83, CSD84, CSD85, CSD86, CSD87, CSD88, CSD89, CSD90, CSD91, CSD92, CSD93, CSD94, CSD95, CSD96, CSD97, CSD98, CSD99, CSD100 | |
| TGFBR1 | Transforming growth factor, beta receptor 1 | AA15, LRS1, LDS1B, LDS2, LDS2B, MFS2, KHC, TAAD2, TCFE2, TCFE2B, RH | |
| TGFBR2 | Transforming growth factor, beta receptor II (70/80 LDs) | | |
| TGFBR3 | Transforming growth factor, beta receptor III | BGCAN, betaglycan | |
| TGFBRAP1 | Transforming growth factor, beta receptor associated protein 1 | RP11-332H14.1, TRAP-1, TRAP1 | |
| TGIF2 | TGFB-induced factor homeobox 2 | | |
| TGM2 | Transglutaminase 2 | KTJ-1054AZZ.2, U-ALPHA-II, UNAH, HEL-S-45, TG2, TGG | |
| TH1L | | | |
| THADA | Thyroid adenoma associated | GITA | |
| THAP1 | THAP domain containing, apoptosis | DYT6 | |
| THAP2 | THAP domain containing, apoptosis | | |
| THAP3 | THAP domain containing, apoptosis | | |
| THAP4 | THAP domain containing 4 | | |
| THAP6 | THAP domain containing 6 | | |
| THBD | Thrombomodulin | AHUS6, BDCA3, CD141, THPH12, THRM, TM | |
| THBS1 | Thrombospondin 1 | THBS, THBS-1, TSP, TSP-1, TSP1 | |

| | | | |
|----------|---|--|--|
| THBS2 | Thrombospondin 2 | XXyac-YX65C7_A.1, TSP2 | |
| THBS4 | Thrombospondin 4 | TSP4 | |
| THEMIS | Thymocyte selection associated | C00H190, C00H207, CASP, SPOT, TSEFA, EA325024.2, EA325024.4 | |
| THOC7 | THO complex 7 homolog (Drosophila) | NIF3L1BP1, fSAP24, hTREX30 | |
| THRA | Thyroid hormone receptor, alpha | AK7, CHNG0, LAK7, LKD-1-1, LRDA, LRDA1, NR1A11, TUBA2, FDBA, 1, TUBA, C-ERDA-2, C-ERDA-BETA, ERDA2, ORTH, NKTAZ, | |
| THRB | Thyroid hormone receptor, beta | DBTL, TUB11, TUBD2, TUBD | |
| THRSP | Thyroid hormone responsive | LPGP1, Lpgp, S14, SPOT14, THRP | |
| THSD1 | Thrombospondin, type 1, domain containing 1 | RP11-245D16.1, TMTSP, UNQ3010 | |
| THSD4 | Thrombospondin, type 1, domain containing 4 | UNQ9554, ADAMTSL0, ADAMTSL0, FVST9554, DDQ24005 | |
| THSD7B | Thrombospondin, type 1, domain containing 7B | | |
| THUMPD1 | THUMP domain containing 1 | | |
| THUMPD2 | THUMP domain containing 2 | C2orf8 | |
| THUMPD3 | THUMP domain containing 3 | | |
| TIA1 | TIA1 cytotoxic granule-associated RNA binding protein like 1 | TIA-1, WDM | |
| TIAL1 | TIA1 cytotoxic granule-associated RNA binding protein like 1 | TCBP, TIAR | |
| TIAM1 | T-cell lymphoma invasion and metastasis 1 | | |
| TICAM2 | Toll-like receptor adaptor molecule 2 | MyD88-4, TICAM-2, TIRAP3, TIRP, TRAM | |
| TIFA | TIRAP-interacting protein with tollreceptor-associated domain | T2BP, T6BPA, TIFA | |
| TIGD6 | Tigger transposable element derived 6 | | |
| TIGD7 | Tigger transposable element derived 7 | Sancho | |
| TIGIT | T cell immunoreceptor with Ig and ITIM domains | VSIG9, VSTM3, WUCAM | |
| TIMELESS | Timeless circadian clock | TIM, TIM1, hTIM | |
| TIMM10 | translocase of inner mitochondrial membrane 10 homolog (yeast) | TIM10, TIM10A | |
| TIMM13 | translocase of inner mitochondrial membrane 13 homolog (yeast) | TIM13, TIM13BA, TIMM13B, ppv1, TIMM13 | |
| TIMM17A | translocase of inner mitochondrial membrane 17 homolog (yeast) | TIM17, TIM17A | |
| TIMM23 | translocase of inner mitochondrial membrane 23 homolog (yeast) | RP11-481A12.7, TIM23 | |
| TIMM50 | translocase of inner mitochondrial membrane 50 homolog (Caenorhabditis) | PRO1512, TIM50, TIM50L | |
| TIMP3 | TIMP metalloproteinase inhibitor 3 | RP1-309I22.1, HSMRK222, K222, K222TA2, SFD | |
| TIMP4 | TIMP metalloproteinase inhibitor 4 | | |
| TINAG | Tubulointerstitial nephritis antigen | RP11-124I4.1, TIN-AG | |
| TIPARP | TICDD-inducible poly(ADP-ribose) polymerase | ARTD14, PARP7, pART14 | |
| TJP2 | Tight junction protein 2 | RP11-101N0.1, C9D0Fq21.11, DFNAST, D0F9q21.11, DFIC4_X101_702 | |
| TK2 | Thymidine kinase 2, mitochondrial | MTDPS2, MTTK | |

| | | | |
|--------------|--|---|--|
| TLE1 | Transducin-like enhancer of split 1 (E(sp1) homolog, Drosophila) | RP11-203D19.1, ESG, ESG1, GRG1 | |
| TLE3 | Transducin-like enhancer of split 3 | ESG, ESG3, GRG3, HsT18976 | |
| TLE4 | Transducin-like enhancer of split 4 | RP11-79D8.3, BCE-1, BCE1, E(sp1), ESG, ESG4, GRG4 | |
| TLK1 | Tousled-like kinase 1 | PKU-beta | |
| TLK2 | Tousled-like kinase 2 | HsHPK, PKU-ALPHA | |
| TLL1 | Tolloid-like 1 | ASD6, TLL | |
| TLL2 | Tolloid-like 2 | | |
| TLN1 | Talin 1 | RP11-112J3.1, ILWEQ, TLN | |
| TLR10 | Toll-like receptor 10 | UNQ315/PRO358, CD290 | |
| TLR4 | Toll-like receptor 4 | ARMD10, CD284, TLR-4, TOLL | |
| TLR6 | Toll-like receptor 6 | CD286 | |
| TLR8 | Toll-like receptor 8 | UNQ249/PRO286, CD288 | |
| TM2D3 | TM2 domain containing 3 | BLP2 | |
| TM4SF1 | Transmembrane 4 L six family member 1 | H-L6, L6, M3S1, TAAL6 | |
| TM7SF3 | Transmembrane 7 superfamily member 3 | | |
| TM9SF3 | Transmembrane 9 superfamily member 3 | RP11-34E5.1, EP70-P-iso, SMBP | |
| TM9SF4 | Transmembrane 9 superfamily member 4 | RP5-836N17.2, dJ836N17.2 | |
| TMC1 | Transmembrane channel-like 1 | RP11-296H15.1, DFNA36, DFNB11, DFNB7 | |
| TMC8 | Transmembrane channel-like 8 | EV2, EVER2, EVIN2 | |
| TMCC1 | Transmembrane and coiled-coil domain family 1 | | |
| TMCC3 | Transmembrane and coiled-coil domain family 3 | | |
| TMCO3 | Transmembrane and coiled-coil domains 3 | RP11-230F18.3, C13orf11 | |
| TMED10 | Transmembrane emp24-like trafficking domain containing 10 | TZ4(DELTA), S5TH25, S5TH25, TM21, Tmp-21-1, p22 | |
| TMED10P1 | Transmembrane emp24-like trafficking domain containing 10 | | |
| TMED5 | Transmembrane emp24 protein transport domain containing 5 | RP5-976O13.2, CGI-100, p28 | |
| TMED6 | Transmembrane emp24 protein transport domain containing 6 | UNQ9146/PRO34237, PRO34237, SPL19146 | |
| TMED7 | Transmembrane emp24 protein transport domain containing 7 | CGI-109, p24gamma3, p27 | |
| TMED7-TICAM2 | TMED7-TICAM2 readthrough | | |
| TMED9 | Transmembrane emp24 protein transport domain containing 9 | GMP25, HSGP25L2G, p25 | |
| TMEFF1 | Transmembrane protein with EGF-like and transmembrane domain | C9orf2, CT120.1, H7365, TR-1 | |
| TMEFF2 | Transmembrane protein with EGF-like and transmembrane domain | UNQ178/PRO204, CT120.2, HPP1, TENB2, TPEF, TR | |
| TMEM105 | Transmembrane protein 105 | | |
| TMEM106A | Transmembrane protein 106A | | |

| | | | |
|----------|----------------------------|--|--|
| TMEM106B | Transmembrane protein 106B | | |
| TMEM107 | Transmembrane protein 107 | DC20, GRVS638, PRO1268 | |
| TMEM108 | Transmembrane protein 108 | UNQ1875/PRO4318, CT124 | |
| TMEM115 | Transmembrane protein 115 | LUCA11.2, PL6 | |
| TMEM116 | Transmembrane protein 116 | | |
| TMEM120B | Transmembrane protein 120B | | |
| TMEM123 | Transmembrane protein 123 | PSEC0111, KCT3, PORIMIN, PORMIN | |
| TMEM126B | Transmembrane protein 126B | HT007 | |
| TMEM127 | Transmembrane protein 127 | | |
| TMEM131 | Transmembrane protein 131 | CC28, PRO1048, RW1, YR-23 | |
| TMEM132A | Transmembrane protein 132A | GBP, HSPA5BP1 | |
| TMEM132B | Transmembrane protein 132B | | |
| TMEM132C | Transmembrane protein 132C | PPP1R152 | |
| TMEM132D | Transmembrane protein 132D | MOLT, PPP1R153 | |
| TMEM133 | Transmembrane protein 133 | AD031 | |
| TMEM135 | Transmembrane protein 135 | PMP52 | |
| TMEM136 | Transmembrane protein 136 | | |
| TMEM138 | Transmembrane protein 138 | HSPC196 | |
| TMEM144 | Transmembrane protein 144 | | |
| TMEM14A | Transmembrane protein 14A | PTD011, C6orf73 | |
| TMEM151B | Transmembrane protein 151B | RP11-444E17.5, C6orf137, TMEM193, bA444E17.5 | |
| TMEM154 | Transmembrane protein 154 | | |
| TMEM155 | Transmembrane protein 155 | | |
| TMEM161B | Transmembrane protein 161B | UNQ679/PRO1313, FLB3342, PRO1313 | |
| TMEM164 | Transmembrane protein 164 | RP13-360B22.2, bB360B22.3 | |
| TMEM165 | Transmembrane protein 165 | CDG2K, FT27, GDT1, TMPT27, TPARL | |
| TMEM167A | Transmembrane protein 167A | TMEM167 | |
| TMEM167B | Transmembrane protein 167B | AD-020, C1orf119 | |
| TMEM168 | Transmembrane protein 168 | | |
| TMEM17 | Transmembrane protein 17 | | |
| TMEM170A | Transmembrane protein 170A | TMEM170 | |
| TMEM170B | Transmembrane protein 170B | RP11-679B17.1 | |
| TMEM173 | Transmembrane protein 173 | LRIS, MITA, MIF13, NET23, SAV1, STING, HMMA, L-STING | |

| | | | |
|----------|----------------------------|-----------------------------|--|
| TMEM178 | Transmembrane protein 178 | tmem178a, zgc:153181 | |
| TMEM18 | Transmembrane protein 18 | | |
| TMEM181 | Transmembrane protein 181 | GPR178, KIAA1423 | |
| TMEM183A | Transmembrane protein 183A | C1orf37 | |
| TMEM183B | Transmembrane protein 183B | C1orf37-DUP | |
| TMEM184C | Transmembrane protein 184C | PRO1355, TMEM34 | |
| TMEM185A | Transmembrane protein 185A | CXorf13, FAM11A, FRAXF, ee3 | |
| TMEM189 | Transmembrane protein 189 | RP5-1185N5.1, KUA | |
| TMEM19 | Transmembrane protein 19 | | |
| TMEM192 | Transmembrane protein 192 | | |
| TMEM194A | Transmembrane protein 194A | TMEM194 | |
| TMEM196 | Transmembrane protein 196 | | |
| TMEM199 | Transmembrane protein 199 | C17orf32 | |
| TMEM20 | | | |
| TMEM200A | Transmembrane protein 200A | HBE61, KIAA1913, TTMA, TTMC | |
| TMEM201 | Transmembrane protein 201 | RP13-15M17.2, NET5 | |
| TMEM202 | Transmembrane protein 202 | | |
| TMEM203 | Transmembrane protein 203 | HBEBP1 | |
| TMEM206 | Transmembrane protein 206 | RP11-384C4.5, C1orf75 | |
| TMEM207 | Transmembrane protein 207 | UNQ846/PRO1784, UNQ846 | |
| TMEM208 | Transmembrane protein 208 | HSPC171 | |
| TMEM213 | Transmembrane protein 213 | | |
| TMEM214 | Transmembrane protein 214 | PP446 | |
| TMEM217 | Transmembrane protein 217 | C6orf128, dJ355M6.2 | |
| TMEM219 | Transmembrane protein 219 | IGFBP-3R | |
| TMEM22 | | | |
| TMEM229A | Transmembrane protein 229A | tcag7.977 | |
| TMEM229B | Transmembrane protein 229B | C14orf83 | |
| TMEM233 | Transmembrane protein 233 | DSPB2, IFITMD2 | |
| TMEM26 | Transmembrane protein 26 | | |
| TMEM27 | Transmembrane protein 27 | UNQ679/PRO1312, NX-17, NX17 | |
| TMEM30A | Transmembrane protein 30A | C6orf67, CDC50A | |
| TMEM33 | Transmembrane protein 33 | 1600019D15Rik, SHINC3 | |

| | | | |
|-------------|---|--|--|
| TMEM35 | Transmembrane protein 35 | RP4-664K17.3 | |
| TMEM38A | Transmembrane protein 38A | TRIC-A, TRICA | |
| TMEM40 | Transmembrane protein 40 | | |
| TMEM41A | Transmembrane protein 41A | UNQ168/PRO194, 2900010K02Rik | |
| TMEM43 | Transmembrane protein 43 | UNQ2564/PRO6244, ARVC5, ARVD5, EDMD7, LUMA | |
| TMEM45A | Transmembrane protein 45A | DERP7 | |
| TMEM45B | Transmembrane protein 45B | | |
| TMEM47 | Transmembrane protein 47 | BCMP1, TM4SF10 | |
| TMEM49 | | | |
| TMEM50A | Transmembrane protein 50A | RP11-335G20.3, IFNRC, SMP1 | |
| TMEM56 | Transmembrane protein 56 | | |
| TMEM57 | Transmembrane protein 57 | RP3-469D22.2, MACOILIN | |
| TMEM63C | Transmembrane protein 63C | C14orf171, CSC1, hsCSC1 | |
| TMEM64 | Transmembrane protein 64 | | |
| TMEM65 | Transmembrane protein 65 | | |
| TMEM71 | Transmembrane protein 71 | | |
| TMEM84 | | | |
| TMEM86A | Transmembrane protein 86A | | |
| TMEM87A | Transmembrane protein 87A | PSEC0094 | |
| TMEM87B | Transmembrane protein 87B | | |
| TMEM8B | Transmembrane protein 8B | RP11-112J3.10, C9orf127, NAG-5, NGX6 | |
| TMEM9 | Transmembrane protein 9 | RP5-894H24.1A, TMEM9 | |
| TMEM92 | Transmembrane protein 92 | UNQ5801/PRO19608 | |
| TMEM97 | Transmembrane protein 97 | MAC30 | |
| TMEM98 | Transmembrane protein 98 | UNQ536/PRO1079, TADA1 | |
| TMEM9B | TMEM9 domain family, member B | UNQ712/PRO1375, C11orf15 | |
| TMF1 | TATA element modulatory factor 1 | ARA160, TMF | |
| TMLHE | Trimethyllysine hydroxylase, epsilon | AUTSX6, BBOX2, TMLD, TMLHD, XAP130, TMLHE | |
| TMOD3 | Tropomodulin 3 (ubiquitous) | UTMOD | |
| TMPPE | Transmembrane protein with metalloprotease domain | | |
| TMPRSS11A | Transmembrane protease, serine 11A | ECRG1 | |
| TMPRSS11BNL | TMPRSS11B N-terminal like, pseudogene | | |
| TMPRSS11D | Transmembrane protease, serine 11D | HAT | |

| | | | |
|----------|--|--|---|
| TNPO1 | Transportin 1 | IPO2, KPNB2, MIP, MIP1, TRN | |
| TNPO3 | Transportin 3 | IPOT2, LGMD11, MTK10A, TRN-3K, TRN-3K2, TRN3D | |
| TNRC6B | Trinucleotide repeat containing 6B | RP5-1042K10.7 | |
| TNRC6C | trinucleotide repeat containing 6C | | |
| TNS1 | Tensin 1 | MST1091, MST091, MST122, MST127, MST12Z, MSTR127, MYD46, PPP1R155, TNS | |
| TNS3 | Tensin 3 | TEM6, TENS1 | |
| TNS4 | Tensin 4 | PP14434, CTEN | |
| TOB2 | Transducer of ERBB2, 2 | CTA-223H9.7, TOB4, TOBL, TROB2 | |
| TOE1 | Target of EGR1, member 1 (nuclear) | | |
| TOM1L1 | Target of myb1 (chicken)-like 1 | OK/KNS-CL.3, SRCASM | |
| TOM1L2 | Target of myb1-like 2 (chicken) | UNQ3124 | |
| TOMM20 | translocase of outer mitochondrial membrane 20 | RP4-597N16.2, MAS20, MOM19, TOM20 | |
| TOMM34 | translocase of outer mitochondrial membrane 34 | HTOM34P, TOM34, URCC3 | |
| TOMM40L | translocase of outer mitochondrial membrane 40L | RP11-297K8.10, TOMM40B | |
| TOMM5 | translocase of outer mitochondrial membrane 5 | C9orf105, Tom5, bA613M10.3 | |
| TOMM7 | translocase of outer mitochondrial membrane 7 homolog (yeast) | AD-014, TOM7 | |
| TOP1 | Topoisomerase (DNA) I | RP3-511B24.1, TOPI | v |
| TOP3B | Topoisomerase (DNA) III beta | TOP3B1 | |
| TOPBP1 | Topoisomerase (DNA) II binding protein 1 | TOP2BP1 | |
| TOPORS | Topoisomerase I binding, arginine/serine-rich, F2 ubiquitin-protein ligase | RP11-205M20.5, LUN, P53BP3, RP31, TP53BPL | |
| TOR1A | Torsin family 1, member A (torsin A) | DQ2, DYT1 | |
| TOR1AIP2 | Torsin A interacting protein 2 | RP11-12M5.5, IFRG15, LULL1, NET9 | |
| TOR3A | Torsin family 3, member A | RP11-177A2.2, ADIR, ADIR2 | |
| TOX | T lymphocyte selection-associated high mobility group box | TOX1 | |
| TP53BP1 | Tumor protein p53 binding protein 1 | 53BP1, p202 | |
| TP53BP2 | Tumor protein p53 binding protein 2 | 53BP2, ASPP2, BBP, P53BP2, PPP1R13A | |
| TP53INP1 | Tumor protein p53 inducible nuclear protein 1 | SNR, TP53DINT1A, TP53DINT1B, Teap, p53DINT1, TP53INP1 | |
| TP53RK | TP53 regulating kinase | TP53RK20.1, BUD32, C200H04, NON-2, NON-2p, RRPK, U191A2 | |
| TP63 | Tumor protein p63 | AR3, B(p51A), B(p51B), EEC3, KET1, LMS, INDI, OFC6, PUS, SUEM4, TP53CB, TP53L, TP73L, p40, p51 | |
| TP73 | Tumor protein p73 | P73 | |
| TPCN2 | Two pore segment channel 2 | SHEP10, TPC2 | |
| TPD52 | Tumor protein D52 | D52, N8L, PC-1, PrLZ, hD52 | |
| TPD52L1 | Tumor protein D52-like 1 | D53, hD53 | |

| | | | |
|-----------|---|---|---|
| TPD52L2 | Tumor protein D52-like 2 | RP4-591C20.2, D54 | |
| TPD52L3 | Tumor protein D52-like 3 | NYDSP25, hD55 | |
| TPM1 | Tropomyosin 1 (alpha) | C15orf13, CMD1Y, CMH3, HTM-alpha, LVNC9, TMSA | |
| TPM3 | Tropomyosin 3 | RP11-203M9.1, CAPM1, CPTD, HELL-189, HELL-5-82P, NEM1, QK/SW-15, TM5, TM2, TM20, TM20-2 | v |
| TPMT | Thiopurine S-methyltransferase | | |
| TPP1 | Tripeptidyl peptidase I | GIG1, CLN2, LPIC, SCAR7, TPP-1 | |
| TPP2 | Tripeptidyl peptidase II | RP11-29B2.2, TPP-2 | |
| TPPP | Tubulin polymerization promoting protein | TPPP/p251, p24, p25, p25alpha, TPPP | |
| TPRG1 | Tumor protein p63 regulated 1 | FAM79B | |
| TPRX1 | Tetra-peptide repeat homeobox 1 | TPRX | |
| TPRXL | Tetra-peptide repeat homeobox-like | | |
| TPST2 | Tyrosylprotein sulfotransferase 2 | CTA-445C9.10-003, TANGO13B | |
| TPTE2P1 | Transmembrane phosphoinositide 3-kinase domain and tyrosine kinase domain 2 | RP11-756A22.3 | |
| TPX2 | TPX2, microtubule-associated | RP11-243J10.10-002, C200H1, C200H2, DIL2, DIL2, FLS252, GD-C20-61, HGA510, HCTR4, RFBP86, 100 | |
| TRA@ | | | v |
| TRAC | T cell receptor alpha constant | IMD7, TCRA, TRA, TRCA | |
| TRADD | TNFRSF1A-associated via death domain | Hs.89862 | |
| TRAF1 | TNF receptor-associated factor 1 | EBI6, MGC:10353 | |
| TRAF3IP2 | TRAF3 interacting protein 2 | RP3-487J7.5, ACT1, C00H2, C00H4, C00H5, C00H6, CANDE8, CHS, DSOBS12 | |
| TRAF5 | TNF receptor-associated factor 5 | RP11-318L16.2, MGC:39780, RNF84 | |
| TRAJ17 | T cell receptor alpha joining 17 | | |
| TRAK1 | Trafficking protein, kinesin binding 1 | MILT1, OIP106 | |
| TRAK2 | Trafficking protein, kinesin binding 2 | ALS2CR3, CALS-C, GRIF-1, GRIF1, MILT2, OIP98 | |
| TRAM1 | Translocation associated membrane protein 1 | PNAS8, TRAM, TRAMP | |
| TRAM1L1 | Translocation associated membrane protein 1-like 1 | | |
| TRANK1 | Tetrapeptide repeat and ankyrin repeat containing 1 | LBA1 | |
| TRAPPC10 | Trafficking protein particle complex 10 | EHOC-1, EHOC1, GT334, TMEM1, TRS130, TRS30 | |
| TRAPPC2 | Trafficking protein particle complex 2 | MIP2A, SEDL, SEDLP1, TRS20, ZNF547L, HTP38534, TRAPPC2 | |
| TRAPPC2P1 | Trafficking protein particle complex 2 pseudogene 1 | MIP-2A, SEDLP, SEDLP1 | |
| TRAPPC6B | Trafficking protein particle complex 6B | TPC6 | |
| TRAT1 | T cell receptor associated transmembrane protein 1 | HSPC062, TCRIM, TRIM | |
| TRAV20 | T cell receptor alpha variable 20 | TCRAV20S1, TCRAV30S1 | |
| TRDMT1 | TRNA aspartic acid methyltransferase 1 | RP11-400H21.1, DNMT12, DNMT2, DNMT3, DNMT3A, DNMT3B, DNMT3L, DNMT3L1 | |

| | | | |
|--------------|---|---|---|
| TRDN | Triadin | RP11-167I10.1, CPVT5, TDN, TRISK | |
| TRDV2 | T cell receptor delta variable 2 | hDV102S1 | |
| TREM1 | Triggering receptor expressed on myeloid cells 1 | CD354, TREM-1 | |
| TREML4 | Triggering receptor expressed on myeloid cells like 4 | UNQ9425/PRO34675, TLT-4, TLT4 | |
| TRERF1 | Transcriptional regulating factor 1 | RP11-159D8.3, BCAR2, HSAZ17270, KAPA, TRERF1Z, TRERF1Z, TRERF1Z | |
| TRHDE | Thyrotropin-releasing hormone degrading enzyme | UNQ2507/PRO5995, PAP-II, PGPEP2, TRH-DE | |
| TRIAP1 | TP53 regulated inhibitor of apoptosis 1 | HSPC132, MDM35, P53CSV, WF-1 | |
| TRIL | TLR4 interactor with leucine-rich repeats | | |
| TRIM13 | Tripartite motif containing 13 | CAR, DLEU5, LEU5, RFP2, RNF77 | |
| TRIM14 | Tripartite motif containing 14 | | |
| TRIM2 | Tripartite motif containing 2 | CMT2R, RNF86 | |
| TRIM22 | Tripartite motif containing 22 | GPSTAF50, RNF94, STAF50 | |
| TRIM23 | Tripartite motif containing 23 | ARD1, ARFD1, RNF46 | |
| TRIM25 | Tripartite motif containing 25 | EFP, RNF147, Z147, ZNF147 | |
| TRIM27 | Tripartite motif containing 27 | DAAP-182E11.3, RFP, RNF76 | √ |
| TRIM3 | Tripartite motif containing 3 | BERP, HAC1, RNF22, RNF97 | |
| TRIM33 | Tripartite motif containing 33 | ECTO, FIC1, RNF7, TRIG, TRIG, TRIGAMMA, TRIGAMMA | √ |
| TRIM34 | Tripartite motif containing 34 | IFP1, RNF21 | |
| TRIM35 | Tripartite motif containing 35 | HLS5, MAIR | |
| TRIM36 | Tripartite motif containing 36 | HAPRIN, RBCC728, RNF98 | |
| TRIM39 | Tripartite motif containing 39 | DAAP-385L22.4, RNF23, TFPB, TRIM39 | |
| TRIM4 | Tripartite motif containing 4 | RNF87 | |
| TRIM41 | Tripartite motif containing 41 | RINCK | |
| TRIM42 | Tripartite motif containing 42 | PPP1R40 | |
| TRIM44 | Tripartite motif containing 44 | DIPB, HSA249128, MC7 | |
| TRIM47 | Tripartite motif containing 47 | GOA, RNF100 | |
| TRIM55 | Tripartite motif containing 55 | MURF-2, RNF29, muRF2 | |
| TRIM61 | Tripartite motif containing 61 | RNF35 | |
| TRIM64 | Tripartite motif containing 64 | C11orf28A, TRIM64 | |
| TRIM69 | Tripartite motif containing 69 | hCG_39321, HSD-34, HSD34, RNF36, Trif | |
| TRIM6-TRIM34 | TRIM6-TRIM34 readthrough | IFP1, RNF21, TRIM34 | |
| TRIM71 | Tripartite motif containing 71, E3 ubiquitin protein ligase | LIN-41, LIN41 | |
| TRIM78P | Tripartite motif containing 78, pseudogene | | |

| | | | |
|----------|--|--|---|
| TRIM9 | Tripartite motif containing 9 | RNF91, SPRING | |
| TRIML2 | Tripartite motif family-like 2 | SPRYD6 | |
| TRIO | Trio Rho guanine nucleotide exchange factor | ARHGEF23, tgat | |
| TRIP13 | Thyroid hormone receptor interactor 13 | 16E1BP | |
| TRMT2A | TRNA methyltransferase 2 homolog A (S. pombe) | HTF9C | |
| TRMT5 | TRNA methyltransferase 5 | KIAA1393, TRM5 | |
| TRMT6 | TRNA methyltransferase 6 homolog (S. pombe) | CGI-09, GCD10, Gcd10p | |
| TRNAU1AP | TRNA selenocysteine 1 associated protein 1 | RP4-669K10.4, PRO1902, SECP43, TRSPAP1 | |
| TRNP1 | TMF1-regulated nuclear protein 1 | C1orf225, TNRP | |
| TROVE2 | TROVE domain family, member 2 | RP11-101E13.3, RO60, RORNPN, SSA2 | |
| TRPA1 | transient receptor potential cation channel, subfamily A, member 1 | | |
| TRPC1 | transient receptor potential cation channel, subfamily C, member 1 | HTRP-1, TRP1 | |
| TRPC5 | transient receptor potential cation channel, subfamily C, member 5 | RP1-68D15.2, PPP1R159, TRP5 | |
| TRPC6 | transient receptor potential cation channel, subfamily C, member 6 | FSGS2, TRP6 | |
| TRPM3 | transient receptor potential cation channel, subfamily M, member 3 | RP11-141J10.3, GON-2, LTRPC3, MLSN2 | |
| TRPM6 | transient receptor potential cation channel, subfamily M, member 6 | RP11-174B4.1, CHAK2, HMGX, HOMG, HOMG1, HSH | |
| TRPM7 | transient receptor potential cation channel, subfamily M, member 7 | ALSPDC, CHAK, CHAK1, LTRPC7, LTRPC7, TRP-PL17 | |
| TRPM8 | transient receptor potential cation channel, subfamily M, member 8 | LTRPC6, TRPP8 | |
| TRPS1 | Trichorhinophalangeal syndrome I | GC79, LGCR | |
| TRPV1 | transient receptor potential cation channel, subfamily V, member 1 | VR1 | |
| TRPV6 | transient receptor potential cation channel, subfamily V, member 6 | ADP/Z1, CAT1, CATE, ECAC2, HSAZ17909, LF0728, ZFAD | |
| TRRAP | transformation/transcription domain-associated protein | PAF350/400, PAF400, STAF40, TR-AP, Tra1 | √ |
| TRUB1 | troubadour domain (psi) synthase family member 1 | PUS4 | |
| TSC1 | Tuberous sclerosis 1 | LAM, TSC | √ |
| TSC22D2 | TSC22 domain family, member 2 | TILZ4a, TILZ4b, TILZ4c | |
| TSEN2 | TSEN2 tRNA splicing endonuclease subunit | PCH2B, SEN2, SEN2L | |
| TSEN34 | TSEN34 tRNA splicing endonuclease subunit | XXbac-BCX105G6.5, LENG5, PCH2C, SEN34, SEN34L | |
| TSFM | TS transcription elongation factor, mitochondrial | EFTS, EFTSMT | |
| TSG1 | Tumor suppressor TSG1 | | |
| TSG101 | Tumor susceptibility 101 | TSG10, VPS23 | |
| TSGA10 | Testis specific, 10 | CEP4L, CT79 | |
| TSGA14 | Testis specific, 14 | | |
| TSHR | Thyroid stimulating hormone receptor | CHNG1, LGR3, hTSHR-I | √ |

| | | | |
|-------------|--|---|--|
| TSIX | TSIX transcript, XIST antisense RNA | LINC00015, lncRNA00015, XIST-AS, XIST-AS1, XIST-AS | |
| TSL | Testis-expressed, seven-twelve, leukemia | | |
| TSLP | Thymic stromal lymphopoietin | | |
| TSNAX | Translin-associated factor X | RP11-17H4.1, TRAX | |
| TSNAX-DISC1 | TSNAX-DISC1 readthrough (NMID candidate) | | |
| TSPAN11 | Tetraspanin 11 | UNQ1971, VSSW1971 | |
| TSPAN12 | Tetraspanin 12 | UNQ774/PRO1568, EVR5, NET-2, NET2, TM4SF12 | |
| TSPAN14 | Tetraspanin 14 | RGD1305714 | |
| TSPAN16 | Tetraspanin 16 | TM-8, TM4-B, TM4SF16 | |
| TSPAN18 | Tetraspanin 18 | UNQ3042/PRO9858, TSPAN | |
| TSPAN32 | Tetraspanin 32 | ART1, PHEMX, PHMX, TSSC6 | |
| TSPAN7 | Tetraspanin 7 | AT5, CCG-B7, CD251, DAST092E, MKX58, MMS1, TALLA-1, TM4SF2, TM4SF2L | |
| TSPAN8 | Tetraspanin 8 | CO-029, TM4SF3 | |
| TSPAN9 | Tetraspanin 9 | NET-5, NET5, PP1057 | |
| TSPYL2 | TSPY-like 2 | RP1-290P12.2, CDAT, CINAI, CTCL, DENT1, IJHHER2216, NP70, SF204, TSPY | |
| TSPYL4 | TSPY-like 4 | RP3-486I3.2, dJ486I3.2 | |
| TSPYL5 | TSPY-like 5 | | |
| TSTD2 | Thiosulfate sulfurtransferase (thioanase)-like domain containing 2 | RP11-244N9.5, C9orf97 | |
| TTBK1 | Tau tubulin kinase 1 | RP3-330M21.4, BDTK | |
| TTC14 | Tetratricopeptide repeat domain 14 | UNQ5813, DRDL5813, PRO19630 | |
| TTC15 | Tetratricopeptide repeat domain 15 | TRAPPC12 | |
| TTC23 | Tetratricopeptide repeat domain 23 | HCC8, HCC-8 | |
| TTC23L | Tetratricopeptide repeat domain 23-like | MC25-1 | |
| TTC28 | Tetratricopeptide repeat domain 28 | RP3-477H23.1, TPRBK | |
| TTC30B | Tetratricopeptide repeat domain 30B | IFT70, fleur | |
| TTC32 | Tetratricopeptide repeat domain 32 | | |
| TTC33 | Tetratricopeptide repeat domain 33 | OSRF | |
| TTC35 | | | |
| TTC38 | Tetratricopeptide repeat domain 38 | LL22NC03-5H6.5 | |
| TTC39A | Tetratricopeptide repeat domain 39A | C1orf34, DEME-6 | |
| TTC39C | Tetratricopeptide repeat domain 39C | C18orf17, HsT2697 | |
| TTC5 | Tetratricopeptide repeat domain 5 | Strap | |
| TTC8 | Tetratricopeptide repeat domain 8 | BBS8, RP51 | |

| | | | |
|---------|---|--|--|
| TTC9 | Tetratricopeptide repeat domain 9 | TTC9A | |
| TTF1 | Transcription termination factor, RNA | TTF-1, TTF-I | |
| TTLL13 | Tubulin tyrosine ligase-like family, member 13 | | |
| TTLL2 | Tubulin tyrosine ligase-like family, member 2 | C6orf104, NYD-TSPG, dJ366N23.3 | |
| TTLL3 | Tubulin tyrosine ligase-like family, member 3 | PRO0207, HOTTL | |
| TTLL5 | Tubulin tyrosine ligase-like family, member 5 | CORD19, KIAA0998, STAMP | |
| TTLL7 | Tubulin tyrosine ligase-like family, member 7 | RP5-836J3.2 | |
| TTPAL | Tocopherol (alpha) transfer protein-like | RP1-179M20.4, C20orf121 | |
| TTY1 | Testis-specific transcript, 1-linked 1 (non-protein coding) | LINC00033, NCRNA00033, TTY1 | |
| TTY12 | Testis-specific transcript, 1-linked 12 (non-protein coding) | TTY11; TTY12; NCRNA00135 | |
| TTY15 | Testis-specific transcript, 1-linked 15 (non-protein coding) | NCRNA00138 | |
| TTY23B | Testis-specific transcript, 1-linked 23B (non-protein coding) | TTY23 | |
| TTY2B | Testis-specific transcript, 1-linked 2B (non-protein coding) | | |
| TTY4B | Testis-specific transcript, 1-linked 4B (non-protein coding) | LINC00124; NCRNA00124 | |
| TTY6 | Testis-specific transcript, 1-linked 6 (non-protein coding) | TTY6; TTY6A; LINC00127; NCRNA00127 | |
| TTY6B | Testis-specific transcript, 1-linked 6B (non-protein coding) | TTY6; TTY6; LINC00128; NCRNA00128 | |
| TTY7 | Testis-specific transcript, 1-linked 7 (non-protein coding) | TTY7; TTY7A; TTY7B; LINC00129; NCRNA00129, CLONE705702 | |
| TTY7B | Testis-specific transcript, 1-linked 7B (non-protein coding) | NCRNA00215 | |
| TTYH1 | Tweety family member 1 | XXbac-BCX535A19.1 | |
| TTYH2 | Tweety family member 2 | C17orf29 | |
| TUB | Tubby bipartite transcription factor | rd5 | |
| TUBAL3 | Tubulin, alpha-like 3 | | |
| TUBB | Tubulin, beta class I | DAAF-285E11.4, CDCBM0, M40, ON/SW-CL501, TUBB5, TUBB | |
| TUBE1 | Tubulin, epsilon 1 | RP1-142L7.1, TUBE, dJ142L7.2 | |
| TUBGCP4 | Tubulin, gamma complex associated protein 4 | 76P, GCP-4, GCP4, Grip76 | |
| TUFM | Tu translation elongation factor, mitochondrial | COXPD4, EF-TuMT, EFTU, P43 | |
| TUFT1 | Tuftelin 1 | RP11-74C1.1 | |
| TUG1 | Taurine up-regulated 1 (non-protein coding) | LINC00080, NCRNA00080, TI-227H | |
| TULP3 | Tubby like protein 3 | TUBL3 | |
| TULP4 | Tubby like protein 4 | RP3-442A17.1, TUSP | |
| TUSC3 | Tumor suppressor candidate 3 | D8S1992, M33, MRT22, MRT7, N33, OST3A | |
| TUSC5 | Tumor suppressor candidate 5 | DSPB1, IFITMD3, LOST1 | |
| TWF1 | Twinfilin actin-binding protein 1 | A6, PTK9 | |

| | | | |
|---------|---|--|---|
| TWIST1 | Twist family bHLH transcription factor 1 | ACS3, DPES2, DPES3, CRS, CRST, SC3, TWIST, LHLH29 | |
| TWISTNB | TWIST neighbor | | |
| TXK | TXK tyrosine kinase | BTKL, PSCTK5, PTK4, RLK, TKL | |
| TXLNA | Taxilin alpha | RP4-622L5.4, IL14, TXLN | |
| TXLNB | Taxilin beta | RP3-522B19.2, C6orf198, LST001, MDP77, dJ522B19.2 | |
| TXLNG | Taxilin gamma | RP11-710A19.4, CA0H13, ELNG, FIAT, LSK2A, TXLNG | |
| TXNDC12 | Thioredoxin domain containing 12 (<i>condensin subunit</i>) | TXNDC12/TKO1370, AOT, AOK1, EKT10, EKT18, ERD10, DDIA16, TLD10, LAG1, LTLD10 | |
| TXNDC15 | Thioredoxin domain containing 15 | UNQ335/PRO534, C5orf14, UNQ335 | |
| TXNDC17 | Thioredoxin domain containing 17 | TRP14, TXNL5 | |
| TXNDC2 | Thioredoxin domain containing 2 (<i>sporotrichum</i>) | SPTRX, SPTRX1 | |
| TXNDC3 | | | |
| TXNRD1 | Thioredoxin reductase 1 | GRIM-12, TR, TR1, TRXR1, TXNR | |
| TYSND1 | Trypsin domain containing 1 | NET41 | |
| U2AF1 | U2 small nuclear RNA auxiliary factor 1 | FP793, RN, RNU2AF1, U2AF35, U2AFBP | √ |
| UACA | Ovarian autoantigen with conserved domains and unknown repeats | NUCLING | |
| UBA5 | Ubiquitin-like modifier activating enzyme 5 | THIFP1, UBE1DC1 | |
| UBA6 | Ubiquitin-like modifier activating enzyme 6 | E1-L2, MOP-4, UBE1L2 | |
| UBAC1 | UBA domain containing 1 | RP11-432J22.3, GBDR1, UBADC1 | |
| UBAC2 | UBA domain containing 2 | RP11-178C10.1, PHGDHL1 | |
| UBAP1 | Ubiquitin associated protein 1 | RP11-571F15.1, NAG20, UAP, UBAP, UBAP-1 | |
| UBAP2 | Ubiquitin associated protein 2 | RP11-176F3.6, UBAP-2 | |
| UBAP2L | Ubiquitin associated protein 2-like | RP11-205M9.4, NICE-4 | |
| UBASH3A | Ubiquitin associated and SH3 domain containing A | CLIP4, STS-2, TULA, TULA-1 | |
| UBASH3B | Ubiquitin associated and SH3 domain containing B | STS-1, STS1, TULA-2, p70 | |
| UBE2A | Ubiquitin-conjugating enzyme E2A | HHR6A, MRXS30, MRXSN, RAD6A, UBC2 | |
| UBE2B | Ubiquitin-conjugating enzyme E2B | E2-17kDa, HHR6B, HR6B, RAD6B, UBC2 | |
| UBE2CBP | Ubiquitin protein ligase E3D | RP4-751H9.1, C6orf157, H10BH, UBE2CBP, YJR141W | |
| UBE2D1 | Ubiquitin-conjugating enzyme E2D 1 | E2(17)KB1, SFT, UBC4/5, UBCH5, UBCH5A | |
| UBE2D3 | Ubiquitin-conjugating enzyme E2D 3 | E2(17)KB3, UBC4/5, UBCH5C | |
| UBE2E1 | Ubiquitin-conjugating enzyme E2E 1 | UBCH6 | |
| UBE2F | Ubiquitin-conjugating enzyme E2F (<i>containing</i>) | NCE2 | |
| UBE2G1 | Ubiquitin-conjugating enzyme E2G 1 | E217K, UBC7, UBE2G | |
| UBE2J1 | Ubiquitin-conjugating enzyme E2, J1 | CGI-70, HSPC153, HSPC203, HSO95243, NCUBE-1, NCUBE1, UBC6, Ubc6 | |

| | | | |
|----------|---|---|---|
| UBE2K | Ubiquitin-conjugating enzyme E2K | E2-25K, HIP2, HYPG, LIG, UBC1 | |
| UBE2L3 | Ubiquitin-conjugating enzyme E2L 3 | E2-F1, L-UBC, UBCH7, UbcM4 | |
| UBE2M | Ubiquitin-conjugating enzyme E2M | UBC-RS2, UBC12, hUbc12 | |
| UBE2O | Ubiquitin-conjugating enzyme E2O | E2-230K | |
| UBE2Q1 | Ubiquitin-conjugating enzyme E2Q family-1 | PRO3094, GTAP, NICE-5, UBE2Q | |
| UBE2Q2P2 | Ubiquitin-conjugating enzyme E2Q family-1 | UBE2QP2; UBE2Q2P3 | |
| UBE2QL1 | Ubiquitin-conjugating enzyme E2Q family-1 | | |
| UBE2R2 | Ubiquitin-conjugating enzyme E2R 2 | RP11-176F3.4, CDC34B, E2-CDC34B, UBC3B | |
| UBE2W | Ubiquitin-conjugating enzyme E2w (containing) | UBC-16, UBC16 | |
| UBE2Z | Ubiquitin-conjugating enzyme E2Z | HOYS7, USE1 | |
| UBE3A | Ubiquitin protein ligase E3A | ANCR, AS, E6-AP, EPVE6AP, HPVE6A | |
| UBE3B | Ubiquitin protein ligase E3B | BPIDS | |
| UBE3C | Ubiquitin protein ligase E3C | tcag7.998, HECTH2 | |
| UBE4A | Ubiquitination factor E4A | E4, UBOX2, UFD2 | |
| UBE4B | Ubiquitination factor E4B | E4, HDNB1, UBOX3, UFD2, UFD2A | |
| UBIAD1 | UbiA prenyltransferase domain containing 1 | RP4-796F18.1, SCCD, TERE1 | |
| UBL3 | Ubiquitin-like 3 | HCG-1, PNSC1 | |
| UBL4A | Ubiquitin-like 4A | AA1W89051D12.1, DA254E, DA3254E, GUPD, GDA, GEF5, MDX2, TMA24, UBL4 | |
| UBL4B | Ubiquitin-like 4B | | |
| UBN2 | Ubinuclein 2 | tcag7.1228 | |
| UBP1 | Upstream binding protein 1 (LBP-1a) | LBP-1B, LBP-1a, LBP1A, LBP1B | |
| UBQLNL | Ubiquilin-like | | |
| UBR2 | Ubiquitin protein ligase E3 component n- | RP5-392M17.3, C00H155, DA49A4.1, GJ242G1.1, H202M17.2 | |
| UBR3 | Ubiquitin protein ligase E3 component n- | ZNF650 | |
| UBR4 | Ubiquitin protein ligase E3 component n- | RP5-1126H10.1, RBAF600, ZUBR1, p600 | |
| UBR5 | Ubiquitin protein ligase E3 component n- | DD5, EDD, EDD1, HYD | v |
| UBTD2 | Ubiquitin domain containing 2 | SB72, DCUBP | |
| UBTF | Upstream binding transcription factor, RNA polymerase I | NOR-90, UBF, UBF-1, UBF1, UBF2 | |
| UBXN10 | UBX domain protein 10 | UBXD3 | |
| UBXN2B | UBX domain protein 2B | p37 | |
| UBXN8 | UBX domain protein 8 | D8S2298E, REP8, UBXD6 | |
| UCHL5 | Ubiquitin carboxyl-terminal hydrolase L5 | RP11-101E13.2, CGI-70, INO80R, UCH-L5, UCH37 | |
| UCK1 | Uridine-cytidine kinase 1 | RP11-334J6.5, URK1 | |

| | | | |
|-----------|---|---|--|
| UCP3 | Uncoupling protein 3 (mitochondrial, proton carrier) | SLC25A9 | |
| UFD1L | Ubiquitin fusion degradation 1 like (yeast) | UFD1 | |
| UFM1 | Ubiquitin-fold modifier 1 | RP11-131P10.1, BM-002, C13orf20 | |
| UFSP2 | UFM1-specific peptidase 2 | C4orf20 | |
| UGDH | UDP-glucose 6-dehydrogenase | GDH, UDP-GlcDH, UDPGDH, UGD | |
| UGGT1 | UDP-glucose glycoprotein | HUGT1, UGCGL1, UGT1 | |
| UGGT2 | UDP-glucose glycoprotein | RP11-31K22.2, HUGT2, UGCGL2, UGT2 | |
| UGT1A1 | UDP-glucuronosyltransferase 1 family, UDP-glucuronosyltransferase 1 family, UDP-glucuronosyltransferase 1 family, | BELQTE1, GNT1, HUG-BKT, UDPGT, UDPGT 1-1, UGT1, UGT1A | |
| UGT1A10 | UDP-glucuronosyltransferase 1 family, UDP-glucuronosyltransferase 1 family, | UDPGT, UGT-1J, UGT1-10, UGT1.10, UGT1J | |
| UGT1A3 | UDP-glucuronosyltransferase 1 family, UDP-glucuronosyltransferase 1 family, | UDPGT, UDPGT 1-3, UGT-1C, UGT1-03, UGT1.3, HCT-BKZ, UDPGT, UDPGT 1-4, UGT-1D, UGT1-04, UGT1.4, UGT1D | |
| UGT1A4 | UDP-glucuronosyltransferase 1 family, UDP-glucuronosyltransferase 1 family, | UDPGT, UDPGT 1-5, UGT1E | |
| UGT1A5 | UDP-glucuronosyltransferase 1 family, UDP-glucuronosyltransferase 1 family, | GNT1, HUGGT, HUGGT1, UDPGT, UDPGT 1-6, UGT1F, UGT1F-7, UGT-1G, UGT1-07, UGT1.7, UGT1G, UDPGT 1-8, UGT-1H, UGT1-08, UGT1.8S, UGT1H, UGT1A8 | |
| UGT1A6 | UDP-glucuronosyltransferase 1 family, UDP-glucuronosyltransferase 1 family, | | |
| UGT1A7 | UDP-glucuronosyltransferase 1 family, UDP-glucuronosyltransferase 1 family, | | |
| UGT1A8 | UDP-glucuronosyltransferase 1 family, UDP-glucuronosyltransferase 1 family, | | |
| UGT2B28 | UDP-glucuronosyltransferase 2 family, UDP-glucuronosyltransferase 2 family, | | |
| UHMK1 | U2AF homology motif (UHM) kinase 1 | KIS, KIST, P-CIP2 | |
| UHRF1 | Ubiquitin-like with F1D and ring finger domains 1 | ICBP90, Np95, RNF106, hNP95, hUHRF1, huNp95 | |
| UHRF1BP1 | UHRF1 binding protein 1 | RP3-349A12.1, C6orf107, ICBP90, dJ349A12.1 | |
| UHRF1BP1L | UHRF1 binding protein 1-like | SHIP164 | |
| UHRF2 | Ubiquitin-like with F1D and ring finger domains 2, F2 ubiquitin protein ligase | RP11-472F14.2, NIRF, RNF107, URF2 | |
| UIMC1 | Ubiquitin interaction motif containing 1 | RAP80, X2HRIP110 | |
| ULK1 | Unc-51 like autophagy activating kinase 1 | ATG1, ATG1A, UNC51, Unc51.1, hATG1 | |
| ULK2 | Unc-51 like kinase 2 | RP25-278F12.3, A630063122KIK, AC015540, UNC51.2, KIAA0622 | |
| ULK3 | Unc-51 like kinase 3 | | |
| ULK4 | Unc-51 like kinase 4 | hCG_1996673, FAM7C1, REC01035 | |
| UMPS | Uridine monophosphate synthetase | OK/SW-cl.21, OPRT | |
| UNC119B | Unc-119 homolog B (<i>C. elegans</i>) | hCG_27366, POC7B | |
| UNC13A | Unc-13 homolog A (<i>C. elegans</i>) | Munc13-1 | |
| UNC13C | Unc-13 homolog C (<i>C. elegans</i>) | Unc13h3 | |
| UNC45B | Unc-45 homolog B (<i>C. elegans</i>) | CMYA4, SMUNC45, UNC45 | |
| UNC5A | Unc-5 homolog A (<i>C. elegans</i>) | UNC5H1 | |
| UNC5B | Unc-5 homolog B (<i>C. elegans</i>) | RP11-5801.1, UNC5H2, p53RDL1 | |

| | | | |
|---------|--|---|--|
| UNC5D | Unc-5 homolog D (<i>C. elegans</i>) | UNQ6012/PRO34692, PRO34692, Unc5h4 | |
| UNC80 | Unc-80 homolog (<i>C. elegans</i>) | C2orf21, UNC-80 | |
| UNKL | Unkempt family zinc finger-like | LA16c-316G12.1, C16orf28, ZC3H5L, ZC3HDC5L | |
| UPB1 | Ureidopropionase, beta | BUP1 | |
| UPF0639 | | | |
| UPP2 | Uridine phosphorylase 2 | UDRPASE2, UP2, UPASE2 | |
| UPRT | Uridine phosphorylase (UPRT) | RP11-311P8.3, FUR1, UPP | |
| UQCC | Ubiquinol-cytochrome c reductase complex | BOS_13488C20orf44 | |
| UQCR11 | Ubiquinol-cytochrome c reductase, complex | 0710008D09Rik, QCR10, UQCR | |
| URB1 | URB1 mitosome biogenesis 1 homolog (D. rerio) | C21orf108, NPA1 | |
| URM1 | Ubiquitin-related modifier URM1 | YIL008W | |
| USH1G | Usher syndrome 1G (autosomal recessive) | ANKS4A, SANS | |
| USH2A | Usher syndrome 2A (autosomal recessive, mild) | RP39, US2, USH2, dJ1111A8.1 | |
| USO1 | USO1 vesicle transport factor | P115, TAP, VDP | |
| USP1 | Ubiquitin specific peptidase 1 | UBP | |
| USP13 | Ubiquitin specific peptidase 13 (isopeptidase) | ISOT3, IsoT-3 | |
| USP14 | Ubiquitin specific peptidase 14 (ubiquitin-specific peptidase) | UNPH-2, UNPH4 | |
| USP15 | Ubiquitin specific peptidase 15 | UNPH-2, UNPH4 | |
| USP17 | Ubiquitin specific peptidase 17-like family member 0, pseudogene | hCG_180774Z, KS447, USP17, USP17A, USP17B, USP17C, USP17D, USP17E, USP17F, USP17G, USP17H, USP17I, USP17J, USP17K, USP17L, USP17M | |
| USP2 | Ubiquitin specific peptidase 2 | UBP41, USP9 | |
| USP24 | Ubiquitin specific peptidase 24 | hCG_33036 | |
| USP25 | Ubiquitin specific peptidase 25 | USP21 | |
| USP28 | Ubiquitin specific peptidase 28 | | |
| USP31 | Ubiquitin specific peptidase 31 | RP11-20G6.3 | |
| USP32 | Ubiquitin specific peptidase 32 | NY-REN-60, USP10 | |
| USP33 | Ubiquitin specific peptidase 33 | VDU1 | |
| USP36 | Ubiquitin specific peptidase 36 | DUB1 | |
| USP37 | Ubiquitin specific peptidase 37 | | |
| USP40 | Ubiquitin specific peptidase 40 | | |
| USP42 | Ubiquitin specific peptidase 42 | tcag7.880 | |
| USP45 | Ubiquitin specific peptidase 45 | RP11-98I9.5 | |
| USP46 | Ubiquitin specific peptidase 46 | | |
| USP47 | Ubiquitin specific peptidase 47 | TRFP | |

| | | | |
|--------|--|---|--|
| USP53 | Ubiquitin specific peptidase 53 | | |
| USP54 | Ubiquitin specific peptidase 54 | RP11-137L10.4, C10orf29, bA137L10.3, bA137L10.4 | |
| USP6NL | USP6 N-terminal like | RP11-89C21.1, RNTRE, TRE2NL-IT1, USP6NL | |
| USP8 | Ubiquitin specific peptidase 8 | HumORF8, SPG59, UBPY | |
| USP9X | Ubiquitin specific peptidase 9, X-linked | RP5-1172N10.4, DFFRX, FAF, FAM, MRX99 | |
| USP9Y | Ubiquitin specific peptidase 9, Y-linked | DFFRY, SPGFY2 | |
| USPL1 | Ubiquitin specific peptidase like 1 | RP11-121O19.1, C13orf22, D13S106E, bA121O19.1 | |
| UST | Uronyl-2-sulfotransferase | 2OST | |
| UTP23 | UTP23, small subunit (SSU) processome component homolog (ustp23) | C8orf53 | |
| UTRN | Utrophin | RP11-352E13.1, DMDL, DRP, DRP1 | |
| UTS2 | Urotensin 2 | UNQ525/PRO1068, PRO1068, U-II, UCN2, UII | |
| UVRAG | UV radiation resistance associated | DHTX, VPS38, p63 | |
| VAMP1 | Vesicle-associated membrane protein 1 (amphiphysin 1) | SPAX1, SYB1, VAMP-1 | |
| VAMP4 | Vesicle-associated membrane protein 4 | RP4-560B9.3, VAMP-4, VAMP24 | |
| VAMP7 | Vesicle-associated membrane protein 7 | SYBL1, TI-VAMP, TIVAMP, VAMP-7 | |
| VANGL1 | VANGL planar cell polarity protein 1 | KITENIN, LPP2, STB2, STBM2 | |
| VAPA | VAMP (vesicle-associated membrane protein) associated protein A and C | VAP-33, VAP-A, VAP33, hVAP-33 | |
| VAPB | VAMP (vesicle-associated membrane protein) associated protein B and C | RP5-1018E9.1, ALS8, VAMP-B, VAP-B | |
| VARS2 | Valyl-tRNA synthetase 2, mitochondrial | DADB-100J14.5, COXFD20, VALKSL, VARSL, VARS2 | |
| VASH1 | Vasohibin 1 | KIAA1036 | |
| VASH2 | Vasohibin 2 | RP11-275G3.1 | |
| VAT1L | Vesicle amine transport 1-like | | |
| VAV3 | Vav 3 guanine nucleotide exchange factor | | |
| VAX1 | Ventral anterior homeobox 1 | RP11-501J20.1, MCOPS11 | |
| VBP1 | Von Hippel-Lindau binding protein 1 | RP13-228J13.4, PFD3, PFDN3, VBP-1 | |
| VCAM1 | Vascular cell adhesion molecule 1 | CD106, INCAM-100 | |
| VCAN | Versican | CSPG2, ERVR, GHAP, PG-M, WGN, WGN1 | |
| VCL | Vinculin | RP11-178G10.3, CMD1W, CMT15, HELL14, MV, MYCL | |
| VCPIP1 | Vasoinhibin containing protein (p97)/p47 complex interacting protein 1 | DUBA3, VCIP135 | |
| VCX | Variable charge, X-linked | VCX-10r-B1, VCX1, VCX10R, VCXB1, VCX | |
| VCX2 | Variable charge, X-linked 2 | VCX-2rR, VCXB, VCX2 | |
| VCX3A | Variable charge, X-linked 3A | VCX3; VCXA; VCX-A; VCX8R; VCX-8r | |
| VCX3B | Variable charge, X-linked 3B | VCX-C, VCXC | |

| | | | |
|----------|---|--|--|
| VCY | Variable charge, Y-linked | BPY11, VCY1A, VCY | |
| VCY1B | Variable charge, Y-linked 1B | BPY1B | |
| VDAC1 | Voltage-dependent anion channel 1 | PORIN, VDAC-1 | |
| VDR | vitamin D (1,25- dihydroxyvitamin D3) receptor | NR111, PPP1R163 | |
| VEGFA | Vascular endothelial growth factor A | RP1-261G23.1, MVCD1, VEGF, VPF | |
| VEPH1 | ventricular zone expressed 11 domain-containing 1 | MELT, VEPH | |
| VEZF1 | Vascular endothelial zinc finger 1 | DB1, ZNF161 | |
| VEZT | vezatin, adherens junctions transmembrane protein | VEZATIN | |
| VGLL2 | Vestigial-like family member 2 | RP1-179P9.2, VGL2, VITO1 | |
| VGLL3 | Vestigial-like family member 3 | VGL-3, VGL3 | |
| VGLL4 | Vestigial-like family member 4 | VGL-4 | |
| VIP | Vasoactive intestinal peptide | RP4-546K19.1, PHM27 | |
| VIPR1 | Vasoactive intestinal peptide receptor 1 | IPVK1, II, PACAF-K2, PACAF-K2, KDC1, VTRG, UAGP30.1, UBD1, VPR3, VPR7, VPR5, PACAF-K3, PACAF-R2, VIP-R-2, VPAC2, VPAC3B, VPACR3B | |
| VIPR2 | Vasoactive intestinal peptide receptor 2 | | |
| VLDLR | Very low density lipoprotein receptor | RP11-320E16.1, CARMQ1, CHRMQ1CH, VLDLR | |
| VMA21 | VMA21 vacuolar H ⁺ -ATPase homolog (S. cerevisiae) | MEAX, XMEA | |
| VN1R103P | Vomer nasal 1 receptor 103 pseudogene | MEAX, XMEA | |
| VNN2 | Vanin 2 | FOAP-4, GPI-80 | |
| VPRBP | Vpr (HIV-1) binding protein | DCAF1 | |
| VPS13A | vacuolar protein sorting 13 homolog A (S. cerevisiae) | RP11-498N2.1, CHAC, CHOREIN | |
| VPS13B | vacuolar protein sorting 13 homolog B (S. cerevisiae) | CHS1, COH1 | |
| VPS13C | vacuolar protein sorting 13 homolog C (S. cerevisiae) | | |
| VPS13D | vacuolar protein sorting 13 homolog D (S. cerevisiae) | | |
| VPS24 | | | |
| VPS26A | vacuolar protein sorting 26 homolog A (S. cerevisiae) | HB58, Hbeta58, PEP8A, VPS26 | |
| VPS33B | vacuolar protein sorting 33 homolog B (S. cerevisiae) | | |
| VPS36 | vacuolar protein sorting 36 homolog (S. cerevisiae) | CGI-145, C13orf9, EAP45 | |
| VPS37A | vacuolar protein sorting 37 homolog A (S. cerevisiae) | HCRP1, PQBP2, SPG53 | |
| VPS37C | vacuolar protein sorting 37 homolog C (S. cerevisiae) | | |
| VPS39 | vacuolar protein sorting 39 homolog (S. cerevisiae) | TLP, VAM6, hVam6p | |
| VPS41 | vacuolar protein sorting 41 homolog (S. cerevisiae) | HVPS41, HVSP41, hVps41p | |
| VPS45 | vacuolar protein sorting 45 homolog (S. cerevisiae) | RP11-45817.2, III, III VPS45, SCN5A, VPS45B, VPS44, VPS45, VPS45A, VPS45 | |
| VPS53 | vacuolar protein sorting 53 homolog (S. cerevisiae) | PP13624, HCCS1, PCH2E, hVps53L, pp13624 | |

| | | | |
|--------|---|---|---|
| VPS54 | vacuolar protein sorting 34 homolog (S. cerevisiae) | HCC8, PPP1R164, SLP-8pL, WR, hVps54L, VPS54 | |
| VPS72 | vacuolar protein sorting 72 homolog (S. cerevisiae) | RP11-68I18.8, CFL1, Swc2, TCFL1, YL-1, YL1 | |
| VPS8 | vacuolar protein sorting 8 homolog (S. cerevisiae) | YAL002WFUN15, VPL8, VPT8 | |
| VRK2 | Vaccinia related kinase 2 | | |
| VRK3 | Vaccinia related kinase 3 | | |
| VSIG1 | v-set and immunoglobulin domain containing 10 | RP5-889N15.1, 1700062D20Rik, GPA34, dJ889N15.1 | |
| VSIG10 | v-set and immunoglobulin domain containing 10 | | |
| VSNL1 | Visinin-like 1 | HLP3, HPCAL3, HUVISL1, VILIP, VILIP-1 | |
| VSTM2A | v-set and transmembrane domain containing 2A | | |
| VSX1 | Visual system homeobox 1 | RP5-1025A1.1, CAASDS, KTCN, KTCN1, PCD, PDCD1, PPD, PNYX | |
| VSX2 | Visual system homeobox 2 | CHX10, HOX10, MCOP2, MCOPCB3, RET1 | |
| VTG1 | Vesicle (multivesicular body) trafficking 1 | HSPC228, C6orf55, DRG-1, DRG1, LIP5, My012, SBP1 | |
| VTCN1 | v-set domain containing 1 cell activation | RP11-227A19.4, D7-114, D7-114, D7-51, D7-A, D7-11.5, PDC1201, VTCN1 | |
| VTI1A | vesicle transport through interaction with t-SNARE domain containing factor A domain containing 1 | RP11-25C19.2, MMDS3, MVti1, VTI1RP2, Vti1-rp2 | v |
| VWA2 | Von Willebrand factor A domain containing 2 | AMACO, CCSP-2, NET42 | |
| VWA3B | Von Willebrand factor A domain containing 3B | | |
| VWA5A | Von Willebrand factor A domain containing 5A | BCSC-1, BCSC1, LOH11CR2A | |
| VWA5B1 | Von Willebrand factor A domain containing 5B1 | | |
| VWC2L | Von Willebrand factor C domain containing protein 2 like | | |
| VWCE | Von Willebrand factor C and EGF domains | URG11, VWC1 | |
| WAPAL | Wings apart-like homolog (Drosophila) | RP11-396M20.1, FOE, KIAA0261, WAPL | |
| WARS | Tryptophanyl-tRNA synthetase | GAMMA-2, IFI53, IFP53 | |
| WASF1 | WAS protein family, member 1 | RP11-181P4.1, SCAR1, WAVE, WAVE1 | |
| WASF2 | WAS protein family, member 2 | IMD2, SCAR2, WASF4, WAVE2, dJ393P12.2 | |
| WASF3 | WAS protein family, member 3 | RP11-496O3.2, Brush-1, SCAR3, WAVE3 | |
| WASL | Wiskott-Aldrich syndrome-like | N-WASP, NWASP | |
| WBP2NL | WBP2 N-terminal like | CTA-250D10.11-006, PAWP | |
| WDFY1 | WD repeat and FYVE domain containing 1 | FENS-1, WDF1, ZFYVE17 | |
| WDFY3 | WD repeat and FYVE domain containing 3 | ALFY, ZFYVE25 | |
| WDR17 | WD repeat domain 17 | | |
| WDR20 | WD repeat domain 20 | DMR | |
| WDR26 | WD repeat domain 26 | PRO0852, CDW2, GID7, MIP2 | |
| WDR27 | WD repeat domain 27 | | |

| | | | |
|---------|--|--|---|
| WDR33 | WD repeat domain 33 | NET14, WDC146 | |
| WDR35 | WD repeat domain 35 | CED2, IFT121, IFTA1, SRTD7 | |
| WDR36 | WD repeat domain 36 | GLC1G, TA-WDRP, TAWDRP, UTP21 | |
| WDR37 | WD repeat domain 37 | RP11-529L18.2 | |
| WDR4 | WD repeat domain 4 | TRM82, TRMT82 | |
| WDR43 | WD repeat domain 43 | NET12, UTP5 | |
| WDR45L | WDR45-like | BOS_19349 | |
| WDR47 | WD repeat domain 47 | RP25-128G10.4, T810075M12NIK, AA352998, ...ZTA_A0802 | |
| WDR60 | WD repeat domain 60 | tcag7.557, FAP163, SRPS6, SRTD8 | |
| WDR61 | WD repeat domain 61 | REC14, SKI8 | |
| WDR62 | WD repeat domain 62 | C19orf14, MCPH2 | |
| WDR63 | WD repeat domain 63 | DIC3, NYD-SP29 | |
| WDR66 | WD repeat domain 66 | CaM-IP4 | |
| WDR67 | WD repeat domain 67 | | |
| WDR69 | | | |
| WDR7 | WD repeat domain 7 | TRAG | |
| WDR72 | WD repeat domain 72 | AI2A3 | |
| WDR82 | WD repeat domain 82 | UNQ9542/PRO34047, MST107, MST1107, PRO2750, PRO24047, SWD2, TMEM112A, WDR82 | |
| WDYHV1 | WDYHV motif containing 1 | C8orf32 | |
| WEE1 | WEE1 G2 checkpoint kinase | WEE1Ahu, WEE1 | |
| WFDC8 | WAP four-disulfide core domain 8 | RP3-461P17.3, C20orf170, WAP8, dJ461P17.1 | |
| WFS1 | Wolfram syndrome 1 (wolframin) | CTRCT41, WFRS, WFS, WFSL | |
| WHAMM | WAS protein homolog associated with actin, cell membranes and microtubules | WHDC1 | |
| WHAMML2 | WAS protein homolog associated with actin, cell membranes and microtubules | WHAMML2; WHDC1L2 | |
| WHSC1 | Wolf-Hirschhorn syndrome candidate 1 | RP11-262P20.3, MMSET, NSD2, REIIBP, TRX5, WHS | √ |
| WHSC2 | Wolf-Hirschhorn syndrome candidate 2 | | |
| WIF1 | WNT inhibitory factor 1 | UNQ191/PRO217, WIF-1 | √ |
| WIPF1 | WAS/ WASL interacting protein family, WD repeat domain, phosphoinositide interacting 2 | PRPL-2, WASPIP, WIP | |
| WIPF2 | WAS/ WASL interacting protein family, WD repeat domain, phosphoinositide interacting 2 | PP10631, WICH, WIRE | |
| WIPI2 | WNT1 inducible signaling pathway protein 2 | CGI-50, ATG18B, Atg21, WIPI-2 | |
| WISP1 | WNT1 inducible signaling pathway protein 1 | CCN4c, WISP1i, WISP1tc, WISP1 | |
| WNK1 | WNK lysine deficient protein kinase 1 | HSAN2, HSN2, KDP, PPP1R167, PRKWNK1, PSK, p65 | |
| WNT10B | Wingless-type (Wnt) 10B integration site family member 10B | SHFM6, WNT-12 | |

| | | | |
|---------|---|--|--|
| WNT11 | wingless-type mfm1 v integration site | HWNT11 | |
| WNT16 | wingless-type mfm1 v integration site | | |
| WNT2B | wingless-type mfm1 v integration site | WNT13 | |
| WNT5A | wingless-type mfm1 v integration site | hWNT5A | |
| WNT5B | wingless-type mfm1 v integration site | | |
| WNT7B | wingless-type mfm1 v integration site | RP11-435J19.1 | |
| WRB | family member 7B Tryptophan rich basic protein | CHD5 | |
| WSB1 | WD repeat and SOCS box containing 1 | SWIP1, WSB-1 | |
| WSB2 | WD repeat and SOCS box containing 2 | SBA2 | |
| WSCD1 | WSC domain containing 1 | | |
| WSCD2 | WSC domain containing 2 | | |
| WTAP | Wilms tumor 1 associated protein | RP1-56L9.4 | |
| WWC2 | WW and C2 domain containing 2 | BOMB | |
| WWC3 | WWC family member 3 | BM042 | |
| WWP1 | ww domain containing E3 ubiquitin protein ligase 1 | AIP5, Tiul1, hSDRP1 | |
| XAF1 | XIAP associated factor 1 | BIRC4BP, HSXIAPAF1, XIAPAF1 | |
| XG | Xg blood group | PBDX | |
| XIAP | X-linked inhibitor of apoptosis | BT1-51501.5, AIP5, BIRC4, IAF-5, ILT1, MIMA, ALI2, LIAP2, LIAP2 | |
| XIRP2 | Xin actin-binding repeat containing 2 | CMYA3 | |
| XKR3 | xk, ken blood group complex subunit- 3 | XRG3, XTES | |
| XKR8 | xk, ken blood group complex subunit- 8 | RP11-460I13.3, XRG8, hXkr8 | |
| XKR9 | xk, ken blood group complex subunit- 9 | XRG9 | |
| XPNPEP2 | α -prolyl aminopeptidase (aminopeptidase r) 2 | RP4-753P9.2, AEACEI, APP2 | |
| XPNPEP3 | α -prolyl aminopeptidase (aminopeptidase r) 3 mutation | RP11-554C12.3, APP3, NPHPL1 | |
| XPO4 | Exportin 4 | exp4 | |
| XPO7 | Exportin 7 | EXP7, RANBP16 | |
| XPR1 | Xenotropic and polytropic retrovirus | | |
| XRCC4 | x-ray repair complementing defective repair in Chinese hamster cells 4 | | |
| XRN1 | 5'-3' exoribonuclease 1 | 41883 | |
| XRRA1 | X-ray radiation resistance associated 1 | | |
| XYLT1 | Xylosyltransferase I | DBQD2, PXYLT1, XT-I, XT1, XTI, XYLT1 | |
| YAF2 | YY1 associated factor 2 | | |
| YAP1 | Yes-associated protein 1 | COB1, YAP, YAP2, YAP65, YKI | |

| | | | |
|--------|---|--|---|
| YIPF4 | Yip1 domain family, member 4 | Nbla11189, FinGER4 | |
| YIPF7 | Yip1 domain family, member 7 | FinGER9 | |
| YJEFN3 | YjeF N-terminal domain containing 3 | | |
| YKT6 | YKT6 v-SNARE homolog (<i>S. cerevisiae</i>) | | |
| YLPM1 | YLP motif containing 1 | C14orf170, PPP1R169, ZAP113, ZAP3 | |
| YME1L1 | YME1-like 1 ATPase | RP11-145E8.2, FTSH, MEG4, PAMP, YME1L | |
| YOD1 | YOD1 deubiquitinase | RP11-164O23.1, DUBA8, OTUD2, PRO0907 | |
| YPEL1 | Yippee-like 1 (<i>Drosophila</i>) | FKSG3 | |
| YPEL2 | Yippee-like 1 (<i>Drosophila</i>) | FKSG4 | |
| YPEL3 | Yippee-like 1 (<i>Drosophila</i>) | FKSG5 | |
| YPEL5 | Yippee-like 5 (<i>Drosophila</i>) | CGI-127 | |
| YTHDC1 | YTH domain containing 1 | YT521, YT521-B | |
| YTHDC2 | YTH domain containing 2 | CAHL | |
| YTHDF2 | YTH domain family, member 2 | HGRG8, NY-REN-2 | |
| YTHDF3 | YTH domain family, member 3 | | |
| YWHAB | tyrosine 3-monooxygenase/tryptophan 3- | RP11-148E22.1, GW128, HEL-S-1, HS1, KCIP-1, YWHA A | |
| YWHAE | tyrosine 3-monooxygenase/tryptophan 3- | 14-3-3E, HEL2, KCIP-1, MDCR, MDS | v |
| YWHAG | tyrosine 3-monooxygenase/tryptophan 3- | 14-3-3GAMMA, PPP1R170 | |
| YWHAQ | tyrosine 3-monooxygenase/tryptophan 3- | 14-3-3, 1C5, HS1 | |
| YWHAZ | tyrosine 3-monooxygenase/tryptophan 3- | 14-3-3-zeta, HEL-S-3, HEL4, KCIP-1, YWHAD | |
| YY1 | YY1 transcription factor | DELTA, INO80S, NF-E1, UCRBP, YIN-YANG-1 | |
| ZADH2 | Zinc binding alcohol dehydrogenase domain | | |
| ZAK | sterne alpha motif and leucine zipper containing kinase AZK | HCCS4AZK, MLK7, MLT, MLTK, MRK, mlklak, pk | |
| ZAN | Zonadhesin | | |
| ZBED1 | Zinc finger, BED-type containing 1 | ALTE, DREF, TRAMP, hDREF | |
| ZBED2 | Zinc finger, BED-type containing 2 | | |
| ZBP1 | Z-DNA binding protein 1 | RP4-718J7.1, C20orf183, DAI, DLM-1, DLM1 | |
| ZBTB10 | Zinc finger and BTB domain containing 10 | RINZF | |
| ZBTB11 | Zinc finger and BTB domain containing 11 | 9230110G02Rik, ZNF-U69274 | |
| ZBTB16 | Zinc finger and BTB domain containing 16 | PLZF, ZNF145 | |
| ZBTB2 | Zinc finger and BTB domain containing 2 | ZNF437 | |
| ZBTB24 | Zinc finger and BTB domain containing 24 | BIF1, ICF2, PATZ2, ZNF450 | |
| ZBTB33 | Zinc finger and BTB domain containing 33 | ZNF-kaiso, ZNF348 | |

| | | | |
|---------|--|--|--|
| ZBTB34 | Zinc finger and BTB domain containing 34 | RP11-106H5.1, ZNF918 | |
| ZBTB38 | Zinc finger and BTB domain containing 38 | CIBZ, PPP1R171, ZNF921 | |
| ZBTB39 | Zinc finger and BTB domain containing 39 | ZNF922 | |
| ZBTB4 | Zinc finger and BTB domain containing 4 | KAISO-L1, ZNF903 | |
| ZBTB40 | Zinc finger and BTB domain containing 40 | ZNF923 | |
| ZBTB41 | Zinc finger and BTB domain containing 41 | RP11-469L3.1, FRBZ1, ZNF924 | |
| ZBTB42 | Zinc finger and BTB domain containing 42 | ZNF925 | |
| ZBTB43 | Zinc finger and BTB domain containing 43 | RP11-489N22.2, ZBTB22B, ZNF-X, ZNF297B | |
| ZBTB44 | Zinc finger and BTB domain containing 44 | BTBD15, HSPC063, ZNF851 | |
| ZBTB49 | Zinc finger and BTB domain containing 49 | ZNF509 | |
| ZBTB7B | Zinc finger and BTB domain containing 7B | RP11-307C12.9, THPOK, ZBTB15, ZNF-07, ZFP07, ZNF857B, KBOY, L-KBOY | |
| ZBTB8B | Zinc finger and BTB domain containing 8B | RP1-27O5.1, ZNF916B | |
| ZBTB9 | Zinc finger and BTB domain containing 9 | DASS-97D12.7, ZNF919 | |
| ZC3H11A | Zinc finger CCCH-type containing 11A | ZC3HDC11A | |
| ZC3H12B | Zinc finger CCCH-type containing 12B | RP3-475B7.1, CXorf32, MCPIP2 | |
| ZC3H12C | Zinc finger CCCH-type containing 12C | MCPIP3 | |
| ZC3H13 | Zinc finger CCCH-type containing 13 | RP11-71J12.1, KIAA0853 | |
| ZC3H6 | Zinc finger CCCH-type containing 6 | ZC3HDC6 | |
| ZC3H7B | Zinc finger CCCH-type containing 7B | RoXaN | |
| ZC3HAV1 | Zinc finger CCCH-type, antiviral 1 | FKO1077, ANTD15, TEBD421, FANF15, ZAI, ZC3H2, ZC3HDC2 | |
| ZCCHC10 | Zinc finger, CCHC domain containing 10 | | |
| ZCCHC11 | Zinc finger, CCHC domain containing 11 | PAPD3, TUT4 | |
| ZCCHC14 | Zinc finger, CCHC domain containing 14 | BDG-29, BDG29 | |
| ZCCHC16 | Zinc finger, CCHC domain containing 16 | Mar4, Mart4 | |
| ZCCHC18 | Zinc finger, CCHC domain containing 18 | PNMA7B, SIZN2 | |
| ZCCHC2 | Zinc finger, CCHC domain containing 2 | C18orf49 | |
| ZCCHC24 | Zinc finger, CCHC domain containing 24 | RP11-342M3.6, C10orf56, Z3CXXC8 | |
| ZCCHC3 | Zinc finger, CCHC domain containing 3 | C20orf99 | |
| ZCWPW2 | Zinc finger, CW type with PWWP domain 2 | ZCW2 | |
| ZDBF2 | Zinc finger, DBF-type containing 2 | | |
| ZDHHC14 | Zinc finger, DHHC-type containing 14 | RP3-481C9.1, NEW1CP | |
| ZDHHC15 | Zinc finger, DHHC-type containing 15 | UNQ1969, MRX91 | |
| ZDHHC17 | Zinc finger, DHHC-type containing 17 | HSPC294, HIP14, HIP3, HYPH | |

| | | | |
|---------|---|--|--|
| ZDHHC18 | Zinc finger, DHHC-type containing 18 | RP1-50O24.3, DHHC-18, DHHC18 | |
| ZDHHC2 | Zinc finger, DHHC-type containing 2 | DHHC2, ZNF372 | |
| ZDHHC21 | Zinc finger, DHHC-type containing 21 | 9130404H11Rik, DHHC-21, DHHC21, DNZ1, HSPC097 | |
| ZDHHC22 | Zinc finger, DHHC-type containing 22 | hCG_1643587, C14orf59 | |
| ZDHHC23 | Zinc finger, DHHC-type containing 23 | NIDD | |
| ZDHHC3 | Zinc finger, DHHC-type containing 3 | HSD49, DHHC-3, GODZ, ZNF373 | |
| ZDHHC4 | Zinc finger, DHHC-type containing 4 | DC1, ZNF374 | |
| ZDHHC7 | Zinc finger, DHHC-type containing 7 | DHHC7, SERZ-B, SERZ1, ZNF370 | |
| ZEB1 | Zinc finger E-box binding homeobox 1 | IKT11-47, ZNF374, ANEB0, DZF, DELTALF1, TECCO, | |
| ZEB2 | Zinc finger E-box binding homeobox 2 | NK1A, B24TF, H3FC0, ZNF1, ZNF1A, SMAD11, | |
| ZFAND2A | Zinc finger, AN1-type domain 2A | ZNF1B AIRAP | |
| ZFAND5 | Zinc finger, AN1-type domain 5 | RP11-63P12.8, ZA20D2A, ZNF216, ZFAND5 | |
| ZFAND6 | Zinc finger, AN1-type domain 6 | HT032, AWP1, ZA20D3, ZFAND5B | |
| ZFAT | Zinc finger and AT hook domain containing | AITD31, ZNF406, ZFAT | |
| ZFATAS | | | |
| ZFC3H1 | Zinc finger, C3H1-type containing | CCDC131, PSRC2 | |
| ZFHX3 | Zinc finger homeobox 3 | ATBF1, ATBT, ZNF927 | |
| ZFHX4 | Zinc finger homeobox 4 | ZFH4, ZHF4 | |
| ZFP1 | ZFP1 zinc finger protein | ZNF475 | |
| ZFP106 | | | |
| ZFP112 | | | |
| ZFP14 | ZFP14 zinc finger protein | ZNF531 | |
| ZFP161 | | | |
| ZFP2 | ZFP2 zinc finger protein | ZNF751 | |
| ZFP28 | ZFP28 zinc finger protein | mkr5 | |
| ZFP30 | ZFP30 zinc finger protein | ZNF745 | |
| ZFP36L1 | ZFP36 ring finger protein-like 1 | BRF1, Berg36, ERF-1, ERF1, RNF162B, TIS11B, cMG1 | |
| ZFP36L2 | ZFP36 ring finger protein-like 2 | BRF2, ERF-2, ERF2, RNF162C, TIS11D | |
| ZFP62 | ZFP62 zinc finger protein | ZET, ZNF755 | |
| ZFP82 | ZFP82 zinc finger protein | ZNF545 | |
| ZFP90 | ZFP90 zinc finger protein | FIK, NK10, ZNF756 | |
| ZFP91 | ZFP91 zinc finger protein | FKSG11, DMS-8, DSM-8, PZF, ZFP-91, ZNF757 | |
| ZFR | Zinc finger RNA binding protein | SPG711, ZFR | |

| | | | |
|----------|--|--|--|
| ZFR2 | Zinc finger RNA binding protein 2 | KIAA1086 | |
| ZFX | Zinc finger protein, X-linked | ZNF926 | |
| ZFY | Zinc finger protein, Y-linked | ZNF911 | |
| ZFYVE16 | Zinc finger, FYVE domain containing 16 | PPP1R69 | |
| ZFYVE20 | Zinc finger, FYVE domain containing 20 | Rabenosyn-5 | |
| ZFYVE26 | Zinc finger, FYVE domain containing 26 | FYVE-CENT, SPG15 | |
| ZFYVE27 | Zinc finger, FYVE domain containing 27 | RP11-459F3.2, PROTRUDIN, SPG33 | |
| ZFYVE28 | Zinc finger, FYVE domain containing 28 | LST2, LYST2 | |
| ZIC2 | Zic family member 2 | HPE5 | |
| ZIC3 | Zic family member 3 | RP1-137H15.3, HTX, HTX1, VACTERLX, ZNF203 | |
| ZIC4 | Zic family member 4 | | |
| ZIC5 | Zic family member 5 | | |
| ZIK1 | Zinc finger protein interacting with K protein | ZNF762 | |
| ZKSCAN1 | Zinc finger with KRAB and SCAN domains | ZNF304, ZNF305, ZNF306, ZNF307, ZNF308, ZNF309, ZNF310, ZNF311, ZNF312, ZNF313, ZNF314, ZNF315, ZNF316, ZNF317, ZNF318, ZNF319, ZNF320, ZNF321, ZNF322 | |
| ZKSCAN2 | Zinc finger with KRAB and SCAN domains | ZNF694, ZSCAN31, ZSCAN34 | |
| ZKSCAN3 | Zinc finger with KRAB and SCAN domains | ZNF47, ZNF300, ZNF300, ZNF309, ZSCAN15, ZSCAN35, ZNF47, ZNF300, ZNF300, ZNF309, ZSCAN15, ZSCAN35, ZNF47, ZNF300, ZNF300, ZNF309, ZSCAN15, ZSCAN35, ZNF47 | |
| ZMAT4 | Zinc finger, matrin-type 4 | | |
| ZMIZ1 | Zinc finger, MIZ-type containing 1 | RP11-519K18.1, MIZ, KAT17, TRAF110, ZIMP10, ZMIZ1 | |
| ZMIZ2 | Zinc finger, MIZ-type containing 2 | HRIHFB2007, NET27, TRAFIP20, ZIMP7, hZIMP7 | |
| ZMPSTE24 | Zinc metallopeptidase STE24 | FACE-1, FACE1, HGPS, PRO1, STE24, Ste24p | |
| ZMYM1 | Zinc finger, MYM-type 1 | RP11-181E22.4, MYM | |
| ZMYM2 | Zinc finger, MYM-type 2 | RP11-264J4.7, FIM, MYM, RAMP, SCLL, ZNF198 | |
| ZMYM4 | Zinc finger, MYM-type 4 | RP11-181E22.3, CDIR, MYM, ZNF198L3, ZNF262 | |
| ZMYM5 | Zinc finger, MYM-type 5 | RP11-523H24.6, HSPC050, MYM, ZNF198L1, ZNF237 | |
| ZMYM6 | Zinc finger, MYM-type 6 | RP11-244H15.3, DUSC12, MYM, ZBED7, ZNF198L4, ZNF259 | |
| ZMYND11 | Zinc finger, MYND-type containing 11 | RP11-486H9.1, BRAM1, BS69 | |
| ZMYND8 | Zinc finger, MYND-type containing 8 | RP5-890O15.1, PRKCBP1, PRO2893, RACK7 | |
| ZNF10 | Zinc finger protein 10 | KOX1 | |
| ZNF100 | Zinc finger protein 100 | | |
| ZNF107 | Zinc finger protein 107 | Y8; ZFD25; ZNF588; smap-7 | |
| ZNF117 | Zinc finger protein 117 | HPF9; H-plk | |
| ZNF12 | Zinc finger protein 12 | KOX3; HZF11; GIOT-3; ZNF325 | |
| ZNF121 | Zinc finger protein 121 | ZHC32; ZNF20; D19S204 | |

| | | | |
|---------|-------------------------------------|---|--|
| ZNF124 | Zinc finger protein 124 | ZK7; HZF16; HZF-16 | |
| ZNF131 | Zinc finger protein 131 | ZBTB35; pHZ-10 | |
| ZNF133 | Zinc finger protein 133 | ZNF150; pHZ-13; pHZ-66 | |
| ZNF136 | Zinc finger protein 136 | pHZ-20 | |
| ZNF137 | Zinc finger protein 137, pseudogene | ZNF137; pHZ-30 | |
| ZNF138 | Zinc finger protein 138 | pHZ-32 | |
| ZNF140 | Zinc finger protein 140 | pHZ-39 | |
| ZNF141 | Zinc finger protein 141 | D4S90; PAPA6; pHZ-44 | |
| ZNF148 | Zinc finger protein 148 | BERF-1; BFCOL1; ZBP-89; ZFP148; pHZ-52; HT-BETA | |
| ZNF154 | Zinc finger protein 154 | pHZ-92 | |
| ZNF160 | Zinc finger protein 160 | F11; HZF5; KR18; HKr18 | |
| ZNF167 | Zinc finger protein 167 | ZFP; FLJ12738 | |
| ZNF17 | Zinc finger protein 17 | HPF3; KOX10 | |
| ZNF175 | Zinc finger protein 175 | OTK18 | |
| ZNF180 | Zinc finger protein 180 | HHZ168 | |
| ZNF181 | Zinc finger protein 181 | HHZ181 | |
| ZNF182 | Zinc finger protein 182 | KOX14; ZNF21; HHZ150; Zfp182 | |
| ZNF184 | Zinc finger protein 184 | | |
| ZNF187 | Zinc finger protein 187 | | |
| ZNF19 | Zinc finger protein 19 | KOX12 | |
| ZNF192 | zinc finger protein 192 | | |
| ZNF197 | Zinc finger protein 197 | F16; VILAK; ZNF20; ZNF100; ZKSCAN9; ZSCAN41; D2S1262E | |
| ZNF200 | Zinc finger protein 200 | | |
| ZNF204P | Zinc finger protein 204, pseudogene | ZNF204; ZNF315P; b24o18.1; ZNF184-Lp | |
| ZNF207 | Zinc finger protein 207 | BuGZ | |
| ZNF208 | Zinc finger protein 208 | PMIDP; ZNF95 | |
| ZNF212 | Zinc finger protein 212 | ZNF182; ZNFC150; C2H2-150 | |
| ZNF217 | Zinc finger protein 217 | ZABC1 | |
| ZNF223 | Zinc finger protein 223 | | |
| ZNF226 | Zinc finger protein 226 | | |
| ZNF229 | Zinc finger protein 229 | | |
| ZNF230 | Zinc finger protein 230 | FDZF2 | |
| ZNF234 | Zinc finger protein 234 | HZF4; ZNF269 | |

| | | | |
|---------|--------------------------|---|--|
| ZNF236 | Zinc finger protein 236 | ZNF236A; ZNF236B | |
| ZNF238 | Zinc finger protein 238 | | |
| ZNF24 | Zinc finger protein 24 | KOX17; RSG-A; ZNF191; ZSCAN3; Zfp191 | |
| ZNF248 | Zinc finger protein 248 | bA162G10.3 | |
| ZNF25 | Zinc finger protein 25 | Zfp9; KOX19 | |
| ZNF250 | Zinc finger protein 250 | ZFP647; ZNF647 | |
| ZNF252 | Zinc finger protein 252 | BC3; ZNF347 | |
| ZNF253 | Zinc finger protein 253 | BMZF1; BMZF-1; ZNF411 | |
| ZNF254 | Zinc finger protein 254 | BMZF-5; ZNF539; ZNF91L; HD-ZNF1 | |
| ZNF257 | Zinc finger protein 257 | BMZF4; BMZF-4 | |
| ZNF26 | Zinc finger protein 26 | KOX20; HEL-179 | |
| ZNF260 | Zinc finger protein 260 | PEX1; OZRF1; ZFP260 | |
| ZNF263 | Zinc finger protein 263 | FPM315; ZSCAN44; ZKSCAN12 | |
| ZNF264 | Zinc finger protein 264 | | |
| ZNF266 | Zinc finger protein 266 | HZF1 | |
| ZNF267 | Zinc finger protein 267 | HZF2 | |
| ZNF268 | Zinc finger protein 268 | HZF3 | |
| ZNF271 | Zinc finger protein 271 | HZF7; ZNFEB | |
| ZNF273 | Zinc finger protein 273 | HZF9 | |
| ZNF274 | Zinc finger protein 274 | ZF2; HFB101; ZSCAN51; ZKSCAN19 | |
| ZNF276 | Zinc finger protein 276 | ZADT; CENPZ; CENP-Z; ZFP276; ZNF477 | |
| ZNF277 | Zinc finger protein 277 | NRIF4; ZNF277P | |
| ZNF28 | Zinc finger protein 28 | KOX24 | |
| ZNF280B | Zinc finger protein 280B | SUHW2; ZNF279; ZNF632; 5'OY11.1; D87009.C22.3 | |
| ZNF280D | Zinc finger protein 280D | SUHW4; ZNF634 | |
| ZNF281 | Zinc finger protein 281 | ZBP-99; ZNP-99 | |
| ZNF283 | Zinc finger protein 283 | HZF19; HZF41 | |
| ZNF284 | Zinc finger protein 284 | ZNF284L | |
| ZNF286A | Zinc finger protein 286A | ZNF286 | |
| ZNF286B | Zinc finger protein 286B | ZNF590; ZNF286C; ZNF286L | |
| ZNF287 | Zinc finger protein 287 | ZSCAN45; ZKSCAN13 | |
| ZNF292 | Zinc finger protein 292 | ZN-16; Zn-15; ZFP292; Nbla00365; bA393I2.3 | |
| ZNF295 | Zinc finger protein 295 | | |

| | | | |
|----------|---|--|--|
| ZNF302 | Zinc finger protein 302 | HSD10, MST1154, ZNF327, MST1154, ZNF155L, ZNF140L | |
| ZNF317 | Zinc finger protein 317 | | |
| ZNF319 | Zinc finger protein 319 | ZFP319 | |
| ZNF320 | Zinc finger protein 320 | ZFPL | |
| ZNF321 | Zinc finger protein 321 | | |
| ZNF323 | Zinc finger protein 323 | | |
| ZNF326 | Zinc finger protein 326 | ZIRD; ZAN75; Zfp326; dJ871E2.1 | |
| ZNF329 | Zinc finger protein 329 | | |
| ZNF333 | Zinc finger protein 333 | | |
| ZNF337 | Zinc finger protein 337 | | |
| ZNF33A | Zinc finger protein 33A | KOX2, KOX3, KOX31, NFTA, ZNF11, ZNF33, ZZADK, ZNF11A | |
| ZNF33B | Zinc finger protein 33B | KOX2; KOX31; ZNF11B | |
| ZNF341 | Zinc finger protein 341 | | |
| ZNF345 | Zinc finger protein 345 | HZF10 | |
| ZNF35 | Zinc finger protein 35 | HF10; HF.10; Zfp105 | |
| ZNF350 | Zinc finger protein 350 | ZFQR; ZBRK1 | |
| ZNF367 | Zinc finger protein 367 | AFF29; ZFF29; CDC14B | |
| ZNF37A | Zinc finger protein 37A | KOX21; ZNF37 | |
| ZNF382 | Zinc finger protein 382 | KS1 | |
| ZNF385B | Zinc finger protein 385B | ZNF533 | |
| ZNF395 | Zinc finger protein 395 | FBI, FNF1, HDBF-2, FNF-1, HDBF-2, HDBF-2, SIF-0-14 | |
| ZNF396 | Zinc finger protein 396 | ZSCAN14 | |
| ZNF397 | Zinc finger protein 397 | ZNF47; ZSCAN15 | |
| ZNF397OS | Zinc finger and SCAN domain containing 30 | ZNF917; ZNF-WYM; ZNF397OS | |
| ZNF398 | Zinc finger protein 398 | P51; P71; ZER6 | |
| ZNF410 | Zinc finger protein 410 | APA1; APA-1 | |
| ZNF416 | Zinc finger protein 416 | | |
| ZNF417 | Zinc finger protein 417 | | |
| ZNF418 | Zinc finger protein 418 | | |
| ZNF419 | Zinc finger protein 419 | ZNF419A | |
| ZNF420 | Zinc finger protein 420 | APAK | |
| ZNF425 | Zinc finger protein 425 | | |
| ZNF43 | Zinc finger protein 43 | HTF6; KOX27; ZNF39L1 | |

| | | | |
|---------|--------------------------|---|--|
| ZNF430 | Zinc finger protein 430 | | |
| ZNF436 | Zinc finger protein 436 | ZNF; Zfp46 | |
| ZNF439 | Zinc finger protein 439 | | |
| ZNF44 | Zinc finger protein 44 | ZNF; KOX7; ZNF55; ZNF58; GIOT-2; ZNF504 | |
| ZNF440 | Zinc finger protein 440 | | |
| ZNF441 | Zinc finger protein 441 | | |
| ZNF443 | Zinc finger protein 443 | ZK1 | |
| ZNF449 | Zinc finger protein 449 | ZSCAN19 | |
| ZNF454 | Zinc finger protein 454 | | |
| ZNF461 | Zinc finger protein 461 | GIOT1; GIOT-1 | |
| ZNF468 | Zinc finger protein 468 | | |
| ZNF469 | Zinc finger protein 469 | BCS; BCS1 | |
| ZNF470 | Zinc finger protein 470 | CZF-1 | |
| ZNF471 | Zinc finger protein 471 | ERP1; Z1971 | |
| ZNF479 | Zinc finger protein 479 | KR19 | |
| ZNF480 | Zinc finger protein 480 | | |
| ZNF483 | Zinc finger protein 483 | ZSCAN48; ZKSCAN16 | |
| ZNF487 | Zinc finger protein 487 | KRBO1; ZNF487P | |
| ZNF490 | Zinc finger protein 490 | | |
| ZNF491 | Zinc finger protein 491 | | |
| ZNF492 | Zinc finger protein 492 | ZNF115 | |
| ZNF493 | Zinc finger protein 493 | | |
| ZNF498 | Zinc finger protein 498 | | |
| ZNF500 | Zinc finger protein 500 | | |
| ZNF501 | Zinc finger protein 501 | ZNF; ZNF52 | |
| ZNF502 | Zinc finger protein 502 | | |
| ZNF506 | Zinc finger protein 506 | | |
| ZNF507 | Zinc finger protein 507 | | |
| ZNF510 | Zinc finger protein 510 | | |
| ZNF511 | Zinc finger protein 511 | | |
| ZNF512 | Zinc finger protein 512 | | |
| ZNF512B | Zinc finger protein 512B | GM632 | |
| ZNF514 | Zinc finger protein 514 | | |

| | | | |
|---------|-------------------------------------|------------|---|
| ZNF516 | Zinc finger protein 516 | HsT287 | |
| ZNF518B | Zinc finger protein 518B | | |
| ZNF519 | Zinc finger protein 51 | HsT2362 | |
| ZNF521 | Zinc finger protein 521 | EHZF; Evi3 | v |
| ZNF525 | Zinc finger protein 525 | | |
| ZNF527 | Zinc finger protein 527 | | |
| ZNF528 | Zinc finger protein 528 | | |
| ZNF529 | Zinc finger protein 529 | | |
| ZNF530 | Zinc finger protein 530 | | |
| ZNF536 | Zinc finger protein 536 | | |
| ZNF540 | Zinc finger protein 540 | Nbla10512 | |
| ZNF542 | Zinc finger protein 542, pseudogene | ZNF542 | |
| ZNF543 | Znc finger protein 543 | | |
| ZNF544 | Znc finger protein 544 | | |
| ZNF547 | Zinc finger protein 547 | | |
| ZNF549 | Zinc finger protein 549 | | |
| ZNF550 | Zinc finger protein 550 | | |
| ZNF551 | Zinc finger protein 551 | | |
| ZNF555 | Zinc finger protein 555 | | |
| ZNF557 | Zinc finger protein 557 | | |
| ZNF558 | Zinc finger protein 558 | | |
| ZNF559 | Zinc finger protein 559 | NBLA00121 | |
| ZNF560 | Zinc finger protein 560 | | |
| ZNF562 | Zinc finger protein 562 | | |
| ZNF563 | Zinc finger protein 563 | | |
| ZNF564 | Zinc finger protein 564 | | |
| ZNF566 | Zinc finger protein 566 | | |
| ZNF568 | Zinc finger protein 568 | | |
| ZNF569 | Zinc finger protein 569 | ZNF; ZAP1 | |
| ZNF571 | Zinc finger protein 571 | HSPC059 | |
| ZNF572 | Zinc finger protein 572 | | |
| ZNF573 | Zinc finger protein 573 | | |
| ZNF575 | Zinc finger protein 575 | | |

| | | | |
|---------|--------------------------|--|--|
| ZNF577 | Zinc finger protein 577 | | |
| ZNF582 | Zinc finger protein 582 | | |
| ZNF584 | Zinc finger protein 584 | | |
| ZNF585A | Zinc finger protein 585A | | |
| ZNF585B | Zinc finger protein 585B | SZFP41 | |
| ZNF586 | Zinc finger protein 586 | | |
| ZNF587 | Zinc finger protein 587 | ZF6 | |
| ZNF589 | Zinc finger protein 589 | SZF1 | |
| ZNF592 | Zinc finger protein 592 | CAMOS; SCAR5 | |
| ZNF594 | Zinc finger protein 594 | | |
| ZNF595 | Zinc finger protein 595 | | |
| ZNF596 | Zinc finger protein 596 | | |
| ZNF598 | Zinc finger protein 598 | | |
| ZNF605 | Zinc finger protein 605 | | |
| ZNF606 | Zinc finger protein 606 | ZNF328 | |
| ZNF607 | Zinc finger protein 607 | | |
| ZNF608 | Zinc finger protein 608 | NY-REN-36 | |
| ZNF609 | Zinc finger protein 609 | | |
| ZNF610 | Zinc finger protein 610 | | |
| ZNF615 | Zinc finger protein 615 | | |
| ZNF618 | Zinc finger protein 618 | NEDD10; FP13169 | |
| ZNF621 | Zinc finger protein 621 | | |
| ZNF623 | Zinc finger protein 623 | | |
| ZNF624 | Zinc finger protein 624 | | |
| ZNF626 | Zinc finger protein 626 | | |
| ZNF638 | Zinc finger protein 638 | ZFML; NP220; Zfp638 | |
| ZNF639 | Zinc finger protein 639 | ZASC1; ANC-2H01; ANC_2H01; 6230400O18Rik | |
| ZNF644 | Zinc finger protein 644 | NatF; MYP21; ZEP-2; BM-005 | |
| ZNF649 | Zinc finger protein 649 | | |
| ZNF652 | Zinc finger protein 652 | | |
| ZNF654 | Zinc finger protein 654 | | |
| ZNF655 | Zinc finger protein 655 | VIK; VIK-1 | |
| ZNF664 | Zinc finger protein 664 | ZFOC1; ZNF176 | |

| | | | |
|---------|-------------------------------------|----------------------|--|
| ZNF665 | Zinc finger protein 665 | ZFP160L | |
| ZNF667 | Zinc finger protein 667 | MIPU1 | |
| ZNF670 | Zinc finger protein 670 | | |
| ZNF673 | Zinc finger family member 673 | | |
| ZNF674 | Zinc finger protein 674 | MRX92; ZNF673B | |
| ZNF675 | Zinc finger protein 675 | TIZ; TBZF | |
| ZNF676 | Zinc finger protein 676 | | |
| ZNF677 | Zinc finger protein 677 | | |
| ZNF678 | Zinc finger protein 678 | | |
| ZNF680 | Zinc finger protein 680 | | |
| ZNF681 | Zinc finger protein 681 | | |
| ZNF682 | Zinc finger protein 682 | BC39498_3 | |
| ZNF697 | Zinc finger protein 697 | | |
| ZNF699 | Zinc finger protein 699 | hang | |
| ZNF700 | Zinc finger protein 700 | | |
| ZNF701 | Zinc finger protein 701 | | |
| ZNF704 | Zinc finger protein 704 | Gig1 | |
| ZNF705A | Zinc finger protein 705A | | |
| ZNF705D | Zinc finger protein 705D | ZNF705C | |
| ZNF708 | Zinc finger protein 708 | KOX8; ZNF15; ZNF15L1 | |
| ZNF709 | Zinc finger protein 709 | | |
| ZNF71 | Zinc finger protein 71 | EZFIT | |
| ZNF714 | Zinc finger protein 714 | | |
| ZNF716 | Zinc finger protein 716 | | |
| ZNF718 | Zinc finger protein 718 | | |
| ZNF720 | Zinc finger protein 720 | | |
| ZNF721 | Zinc finger protein 721 | | |
| ZNF724P | Zinc finger protein 724, pseudogene | | |
| ZNF726 | Zinc finger protein 726 | | |
| ZNF730 | Zinc finger protein 730 | | |
| ZNF732 | Zinc finger protein 732 | | |
| ZNF737 | Zinc finger protein 737 | ZNF102 | |
| ZNF738 | Zinc finger protein 738 | | |

| | | | |
|---------|-------------------------------------|---------------------------------------|--|
| ZNF74 | Zinc finger protein 74 | COS52; hZNF7; ZFP520; ZNF520 | |
| ZNF747 | Zinc finger protein 747 | | |
| ZNF750 | Zinc finger protein 750 | ZFP750 | |
| ZNF75D | Zinc finger protein 75D | D8C6; ZNF75; ZNF82; ZSCAN28; ZKSCAN24 | |
| ZNF76 | zinc finger protein 76 | ZNF523; Zfp523; D6S229E | |
| ZNF761 | Zinc finger protein 761 | ZNF468 | |
| ZNF763 | Zinc finger protein 763 | ZNF; ZNF440L | |
| ZNF765 | Zinc finger protein 765 | | |
| ZNF766 | Zinc finger protein 766 | | |
| ZNF770 | Zinc finger protein 770 | PRO1914 | |
| ZNF776 | Zinc finger protein 776 | | |
| ZNF778 | Zinc finger protein 778 | | |
| ZNF780A | Zinc finger protein 780A | ZNF780 | |
| ZNF780B | Zinc finger protein 780B | ZNF779 | |
| ZNF781 | Zinc finger protein 781 | | |
| ZNF783 | Zinc finger family member 783 | | |
| ZNF788 | Zinc finger family member 788 | | |
| ZNF790 | Zinc finger protein 790 | | |
| ZNF792 | Zinc finger protein 792 | | |
| ZNF793 | Zinc finger protein 793 | | |
| ZNF799 | Zinc finger protein 799 | HIT-40; ZNF842 | |
| ZNF80 | Zinc finger protein 80 | pT17 | |
| ZNF800 | Zinc finger protein 800 | | |
| ZNF805 | Zinc finger protein 805 | | |
| ZNF806 | Zinc finger protein 806 | | |
| ZNF808 | Zinc finger protein 808 | | |
| ZNF81 | Zinc finger protein 81 | HFZ20; MRX45; dJ54B20.6 | |
| ZNF814 | Zinc finger protein 814 | | |
| ZNF815 | Zinc finger protein 815, pseudogene | ZNF815 | |
| ZNF823 | Zinc finger protein 823 | HSZFP36 | |
| ZNF826 | Zinc finger protein 826, pseudogene | ZNF826 | |
| ZNF83 | Zinc finger protein 83 | HPF1; ZNF816B | |
| ZNF830 | Zinc finger protein 830 | OMCG1; CCDC16 | |

| | | | |
|-----------|--|--|--|
| ZNF831 | Zinc finger protein 831 | C20orf174; dJ492J12.1 | |
| ZNF833 | Zinc finger protein 833, pseudogene | ZNF833 | |
| ZNF84 | Zinc finger protein 84 | HPF2 | |
| ZNF844 | Zinc finger protein 844 | | |
| ZNF845 | Zinc finger protein 845 | | |
| ZNF85 | Zinc finger protein 85 | HPF4; HTF1 | |
| ZNF862 | Zinc finger protein 862 | | |
| ZNF876P | Zinc finger protein 876, pseudogene | | |
| ZNF879 | Zinc finger protein 879 | DKFZp686E2433 | |
| ZNF90 | Zinc finger protein 90 | HTF9 | |
| ZNF91 | Zinc finger protein 91 | HPF7; HTF10 | |
| ZNF92 | Zinc finger protein 92 | TF12; HPF12; HTF12; HEL-203 | |
| ZNF93 | Zinc finger protein 93 | TF34; HPF34; HTF34; ZNF505 | |
| ZNF98 | Zinc finger protein 98 | F7175; ZNF739 | |
| ZNHIT1 | Zinc finger, HIT-type containing 1 | CG1I; ZNFN4A1 | |
| ZNRD1 | Zinc ribbon domain containing 1 | TEX6; ZR14; Rpa12; hZR14; HTEX-6; tctex-6 | |
| ZNRF2 | Zinc and ring finger 2 | zinc and ring finger 2 | |
| ZNRF3 | Zinc and ring finger 3 | RNF203; BK747E2.3 | |
| ZNRF4 | Zinc and ring finger 4 | spzn; RNF204; Ssrzf1; SPERIZIN | |
| ZRANB1 | Zinc finger, RAN-binding domain containing 1 | RP11-298J20.4, TRABID | |
| ZRANB2 | Zinc finger, RAN-binding domain containing 2 | ZIS; ZIS1; ZIS2; ZNF265 | |
| ZRANB3 | Zinc finger, RAN-binding domain containing 3 | AH2; 4933425L19Rik | |
| ZSCAN10 | Zinc finger and SCAN domain containing 10 | Zfp206; Znf206; BC068284; Zkscan10 | |
| ZSCAN12 | Zinc finger and SCAN domain containing 12 | Zfp96; FPM315; mKIAA0426; 2510038J07Rik | |
| ZSCAN12P1 | Zinc finger and SCAN domain containing 12 pseudogene 1 | ZNF306L1; ZNF306P1; ZNF187P1; ZNF305P1, ZSCAN12L1; dJ212J6.7 | |
| ZSCAN18 | Zinc finger and SCAN domain containing 18 | ZNF447 | |
| ZSCAN20 | Zinc finger and SCAN domain containing 20 | KOX29; ZNF31; ZFP-31; ZNF360 | |
| ZSCAN22 | Zinc finger and SCAN domain containing 22 | HKR2; ZNF50 | |
| ZSCAN23 | Zinc finger and SCAN domain containing 23 | ZNF390; ZNF453 | |
| ZSWIM1 | Zinc finger SWIM-type containing 1 | AI850991 | |
| ZSWIM2 | Zinc finger, SWIM-type containing 2 | MEX | |
| ZSWIM5 | Zinc finger, SWIM-type containing 5 | AI503093 | |
| ZSWIM7 | Zinc finger, SWIM-type containing 7 | SWS1 | |

| | | | |
|--------|--|---------|--|
| ZWILCH | Zwilch kinetochore protein | KNTC1AP | |
| ZWINT | ZW10 interacting kinetochore protein | ZWINT1 | |
| ZXDB | Zinc finger, X-linked, duplicated B | ZNF905 | |
| ZXDC | ZXD family zinc finger C | ZXDL | |
| ZYG11B | Zyg-11 family member B, cell cycle regulator | ZYG11 | |
| ZZEF1 | Zinc finger, ZZ-type with EF-hand domain 1 | ZZZA | |
| ZZZ3 | Zinc finger, ZZ-type containing 3 | ATAC1 | |

Supplementary Table 5. Predicted targets of hsa-miR-181a-5p by miRDB.

| Gene symbol | Full name | Target score | Cancer-related gene |
|--------------------|--|---------------------|----------------------------|
| AAK1 | AP2 associated kinase 1 | 67 | |
| AASDHPPT | Amino adipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase | 69 | |
| ABHD13 | Abhydrolase domain containing 13 | 64 | |
| ABI1 | Abl-interactor 1 | 53 | v |
| ABI3BP | ABI family, member 3 (NESH) binding protein | 78 | |
| ACP1 | Acid phosphatase 1, soluble | 66 | |
| ACSL1 | Acyl-CoA synthetase long-chain family member 1 | 74 | |
| ACSM2B | Acyl-CoA synthetase medium-chain family member 2B | 61 | |
| ACVR2A | Activin A receptor, type IIA | 90 | |
| ACVR2B | Activin A receptor, type IIB | 96 | |
| ACYP1 | Acylphosphatase 1, erythrocyte (common) type | 70 | |
| ADAM11 | ADAM metallopeptidase domain 11 | 62 | |
| ADAM28 | ADAM metallopeptidase domain 28 | 72 | |
| ADAMTS18 | ADAM metallopeptidase with thrombospondin type 1 motif, 18 | 59 | |
| ADAMTS5 | ADAM metallopeptidase with thrombospondin type 1 motif, 5 | 64 | |
| ADAMTSL1 | ADAMTS-like 1 | 71 | |
| ADARB1 | Adenosine deaminase, RNA-specific, B1 | 63 | |
| ADARB2 | Adenosine deaminase, RNA-specific, B2 | 51 | |
| ADCK3 | aarF domain containing kinase 3 | 71 | |
| ADM | Adrenomedullin | 57 | |
| ADO | 2-Aminoethanethiol (cysteamine) dioxygenase | 70 | |
| ADRBK1 | Adrenergic, beta, receptor kinase 1 | 79 | |
| AFF2 | AF4/FMR2 family, member 2 | 60 | |
| AFG3L2 | AFG3 ATPase family gene 3-like 2 (<i>S. cerevisiae</i>) | 91 | |
| AFTPH | Aftiphilin | 61 | |
| AGK | Acylglycerol kinase | 52 | |
| AGTR1 | Angiotensin II receptor, type 1 | 53 | |
| AHCTF1 | AT hook containing transcription factor 1 | 70 | |

| | | | |
|-----------------|---|----|--|
| AIM1L | Absent in melanoma 1-like | 55 | |
| AKAP5 | A kinase (PRKA) anchor protein 5 | 87 | |
| AKAP6 | A kinase (PRKA) anchor protein 6 | 73 | |
| AKAP7 | A kinase (PRKA) anchor protein 7 | 83 | |
| AKD1 | Adenylate kinase domain containing 1 | 61 | |
| AKT3 | V-akt murine thymoma viral oncogene homolog 3 (protein kinase B, gamma) | 89 | |
| ALDH9A1 | Aldehyde dehydrogenase 9 family, member A1 | 52 | |
| ALG1 | Asparagine-linked glycosylation 1, beta-1,4-mannosyltransferase homolog (<i>S. cerevisiae</i>) | 57 | |
| ALG11 | Asparagine-linked glycosylation 11, alpha-1,2-mannosyltransferase homolog (yeast) | 62 | |
| ALG9 | Asparagine-linked glycosylation 9, alpha-1,2-mannosyltransferase homolog (<i>S. cerevisiae</i>) | 63 | |
| ANAPC16 | Anaphase promoting complex subunit 16 | 77 | |
| ANKRD13C | Ankyrin repeat domain 13C | 98 | |
| ANKRD33B | Ankyrin repeat domain 33B | 52 | |
| ANKRD34C | Ankyrin repeat domain 34C | 51 | |
| ANKRD43 | Ankyrin repeat domain 43 | 60 | |
| ANKRD44 | Ankyrin repeat domain 44 | 50 | |
| ANO1 | Anoctamin 1, calcium activated chloride channel | 70 | |
| ANTXR2 | Anthrax toxin receptor 2 | 53 | |
| AP1G1 | Adaptor-related protein complex 1, gamma 1 subunit | 67 | |
| AP1S3 | Adaptor-related protein complex 1, sigma 3 subunit | 61 | |
| ARF6 | ADP-ribosylation factor 6 | 69 | |
| ARFGEF2 | ADP-ribosylation factor guanine nucleotide-exchange factor 2 (brefeldin A-inhibited) | 68 | |
| ARHGAP26 | Rho GTPase activating protein 26 | 79 | |
| ARHGEF3 | Rho guanine nucleotide exchange factor (GEF) 3 | 97 | |
| ARHGEF38 | Rho guanine nucleotide exchange factor (GEF) 38 | 56 | |
| ARHGEF7 | Rho guanine nucleotide exchange factor (GEF) 7 | 50 | |
| ARL2BP | ADP-ribosylation factor-like 2 binding protein | 51 | |
| ARL5A | ADP-ribosylation factor-like 5A | 68 | |
| ARL5B | ADP-ribosylation factor-like 5B | 58 | |
| ARL6IP5 | ADP-ribosylation-like factor 6 interacting protein 5 | 61 | |
| ARMC8 | Armadillo repeat containing 8 | 60 | |
| ARPC1A | Actin related protein 2/3 complex, subunit 1A, 41 kDa | 55 | |
| ARRDC4 | Arrestin domain containing 4 | 61 | |

| | | | |
|-----------------|---|----|---|
| ARSJ | Arylsulfatase family, member J | 87 | |
| ATF1 | Activating transcription factor 1 | 76 | v |
| ATG5 | ATG5 autophagy related 5 homolog (<i>S. cerevisiae</i>) | 73 | |
| ATM | Ataxia telangiectasia mutated | 91 | v |
| ATP11C | ATPase, class VI, type 11C | 83 | |
| ATP1B1 | ATPase, Na ⁺ /K ⁺ transporting, beta 1 polypeptide | 56 | |
| ATP1B2 | ATPase, Na ⁺ /K ⁺ transporting, β 2 polypeptide | 50 | |
| ATP2A2 | ATPase, Ca ⁺⁺ transporting, cardiac muscle, slow twitch 2 | 88 | |
| ATP2B1 | ATPase, Ca ⁺⁺ transporting, plasma membrane 1 | 91 | |
| ATP2B2 | ATPase, Ca ⁺⁺ transporting, plasma membrane 2 | 62 | |
| ATP6V1C2 | ATPase, H ⁺ transporting, lysosomal 42kDa, V1 subunit C2 | 61 | |
| ATRN | Attractin | 50 | |
| ATXN1 | Ataxin 1 | 66 | |
| ATXN3 | Ataxin 3 | 86 | |
| ATXN7 | Ataxin 7 | 52 | |
| B3GNT5 | UDP-GlcNAc: β Gal β -1,3- <i>N</i> -acetylglucosaminyltransferase 5 | 58 | |
| B4GALT1 | UDP-Gal: β GlcNAc β 1,4- galactosyltransferase, polypeptide 1 | 53 | |
| BAG2 | BCL2-associated athanogene 2 | 76 | |
| BAG4 | BCL2-associated athanogene 4 | 81 | |
| BAI3 | Brain-specific angiogenesis inhibitor 3 | 88 | |
| BAZ2B | Bromodomain adjacent to zinc finger domain, 2B | 82 | |
| BBS7 | Bardet-Biedl syndrome 7 | 71 | |
| BBS9 | Bardet-Biedl syndrome 9 | 63 | |
| BCHE | Butyrylcholinesterase | 59 | |
| BCL11A | B-cell CLL/lymphoma 11A (zinc finger protein) | 52 | v |
| BEND3 | BEN domain containing 3 | 87 | |
| BHLHE40 | Basic helix-loop-helix family, member e40 | 80 | |
| BIRC6 | Baculoviral IAP repeat containing 6 | 97 | |
| BMP2K | BMP2 inducible kinase | 62 | |
| BOLL | Bol, boule-like (<i>Drosophila</i>) | 71 | |
| BRAP | BRCA1 associated protein | 92 | |

| | | | |
|------------------|---|-----|--|
| BRD1 | Bromodomain containing 1 | 82 | |
| BRWD1 | Bromodomain and WD repeat domain containing 1 | 100 | |
| BTBD3 | BTB (POZ) domain containing 3 | 84 | |
| C11orf41 | Chromosome 11 open reading frame 41 | 63 | |
| C11orf70 | Chromosome 11 open reading frame 70 | 73 | |
| C11orf87 | Chromosome 11 open reading frame 87 | 51 | |
| C12orf29 | Chromosome 12 open reading frame 29 | 56 | |
| C14orf129 | Chromosome 14 open reading frame 129 | 94 | |
| C14orf135 | Chromosome 14 open reading frame 135 | 59 | |
| C14orf28 | Chromosome 14 open reading frame 28 | 56 | |
| C14orf43 | Chromosome 14 open reading frame 43 | 56 | |
| C15orf2 | Chromosome 15 open reading frame 2 | 53 | |
| C15orf29 | Chromosome 15 open reading frame 29 | 77 | |
| C15orf48 | Chromosome 15 open reading frame 48 | 50 | |
| C16orf87 | Chromosome 16 open reading frame 87 | 78 | |
| C16orf95 | Chromosome 16 open reading frame 95 | 58 | |
| C17orf39 | Chromosome 17 open reading frame 39 | 52 | |
| C19orf12 | Chromosome 19 open reading frame 12 | 82 | |
| C1orf109 | Chromosome 1 open reading frame 109 | 60 | |
| C1orf96 | Chromosome 1 open reading frame 96 | 65 | |
| C20orf29 | Chromosome 20 open reading frame 29 | 50 | |
| C2orf54 | Chromosome 2 open reading frame 54 | 57 | |
| C2orf69 | Chromosome 2 open reading frame 69 | 72 | |
| C3orf43 | Chromosome 3 open reading frame 43 | 58 | |
| C3orf62 | Chromosome 3 open reading frame 62 | 75 | |
| C3orf80 | Chromosome 3 open reading frame 80 | 50 | |
| C4orf40 | Chromosome 4 open reading frame 40 | 81 | |
| C5orf41 | Chromosome 5 open reading frame 41 | 97 | |
| C5orf47 | Chromosome 5 open reading frame 47 | 83 | |
| C6orf62 | Chromosome 6 open reading frame 62 | 68 | |
| C6orf89 | Chromosome 6 open reading frame 89 | 72 | |
| C7orf41 | Chromosome 7 open reading frame 41 | 75 | |
| C8orf59 | Chromosome 8 open reading frame 59 | 61 | |

| | | | |
|------------------|---|----|---|
| CA5B | Carbonic anhydrase VB, mitochondrial | 56 | |
| CACNA2D4 | Calcium channel, voltage-dependent, $\alpha 2/\delta$ subunit 4 | 51 | |
| CALB1 | Calbindin 1, 28 kDa | 71 | |
| CALCR | Calcitonin receptor | 72 | |
| CALCRL | Calcitonin receptor-like | 52 | |
| CALM1 | Calmodulin 1 (phosphorylase kinase, δ) | 54 | |
| CAMK2D | Calcium/calmodulin-dependent protein kinase I δ | 85 | |
| CAPRIN1 | Cell cycle associated protein 1 | 73 | |
| CAPRIN2 | Caprin family member 2 | 68 | |
| CARD8 | Caspase recruitment domain family, member 8 | 77 | |
| CASK | Calcium/calmodulin-dependent serine protein kinase (MAGUK family) | 60 | |
| CBLB | Cas-Br-M (murine) ecotropic retroviral transforming sequence b | 60 | v |
| CBLL1 | Cas-Br-M (murine) ecotropic retroviral transforming sequence-like 1 | 69 | |
| CBX4 | Chromobox homolog 4 | 54 | |
| CBX7 | Chromobox homolog 7 | 84 | |
| CCAR1 | Cell division cycle and apoptosis regulator 1 | 80 | |
| CCDC117 | Coiled-coil domain containing 117 | 73 | |
| CCDC14 | Coiled-coil domain containing 14 | 87 | |
| CCDC144NL | Coiled-coil domain containing 144 family, N-terminal like | 54 | |
| CCDC25 | Coiled-coil domain containing 25 | 65 | |
| CCDC42 | Coiled-coil domain containing 42 | 60 | |
| CCDC62 | Coiled-coil domain containing 62 | 51 | |
| CCDC75 | Coiled-coil domain containing 75 | 59 | |
| CCDC88C | Coiled-coil domain containing 88C | 52 | |
| CCNB1 | Cyclin B1 | 70 | |
| CCNDBP1 | Cyclin D-type binding-protein 1 | 86 | |
| CCNG1 | Cyclin G1 | 60 | |
| CCNJ | Cyclin J | 77 | |
| CCNK | Cyclin K | 66 | |
| CCT8L2 | Chaperonin containing TCP1, subunit 8 (theta)-like 2 | 50 | |
| CD1E | CD1e molecule | 50 | |
| CD302 | CD302 molecule | 73 | |
| CD4 | CD4 molecule | 62 | |

| | | | |
|-------------------|---|----|--|
| CD48 | CD48 molecule | 60 | |
| CD69 | CD69 molecule | 63 | |
| CDC14B | CDC14 cell division cycle 14 homolog B (<i>S. cerevisiae</i>) | 52 | |
| CDC40 | Cell division cycle 40 homolog (<i>S. cerevisiae</i>) | 65 | |
| CDC42BPA | CDC42 binding protein kinase α (DMPK-like) | 67 | |
| CDKN2AIP | CDKN2A interacting protein | 52 | |
| CDKN2AIPNL | CDKN2A interacting protein N-terminal like | 50 | |
| CDKN3 | Cyclin-dependent kinase inhibitor 3 | 51 | |
| CDON | Cdon homolog (mouse) | 79 | |
| CDYL | Chromodomain protein, Y-like | 55 | |
| CEBPG | CCAAT/enhancer binding protein (C/EBP), γ | 59 | |
| CEP120 | Centrosomal protein 120 kDa | 64 | |
| CERS3 | Ceramide synthase 3 | 50 | |
| CETN3 | Centrin, EF-hand protein, 3 | 64 | |
| CHCHD7 | Coiled-coil-helix-coiled-coil-helix domain containing 7 | 52 | |
| CHD9 | Chromodomain helicase DNA binding protein 9 | 50 | |
| CHMP1B | Charged multivesicular body protein 1B | 78 | |
| CHMP2B | Charged multivesicular body protein 2B | 81 | |
| CLASP1 | Cytoplasmic linker associated protein 1 | 71 | |
| CLDN8 | Claudin 8 | 72 | |
| CLEC3A | C-type lectin domain family 3, member A | 55 | |
| CLIP1 | CAP-GLY domain containing linker protein 1 | 87 | |
| CLMN | Calmin (calponin-like, transmembrane) | 98 | |
| CLN8 | Ceroid-lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation) | 52 | |
| CLVS1 | Clavesin 1 | 74 | |
| CNKSR3 | CNKSR family member 3 | 54 | |
| CNNM2 | Cyclin M2 | 68 | |
| CNOT2 | CCR4-NOT transcription complex, subunit 2 | 68 | |
| CNR1 | Cannabinoid receptor 1 (brain) | 53 | |
| CNTN4 | Contactin 4 | 76 | |
| COL19A1 | Collagen, type XIX, alpha 1 | 54 | |
| COPS2 | COP9 constitutive photomorphogenic homolog subunit 2 (<i>Arabidopsis</i>) | 68 | |
| COQ2 | Coenzyme Q2 homolog, prenyltransferase (yeast) | 58 | |

| | | | |
|------------------|--|----|---|
| CPD | Carboxypeptidase D | 65 | |
| CPEB4 | Cytoplasmic polyadenylation element binding protein 4 | 68 | |
| CPNE2 | Copine II | 84 | |
| CPOX | Coproporphyrinogen oxidase | 97 | |
| CPSF6 | Cleavage and polyadenylation specific factor 6, 68 kDa | 69 | |
| CREB1 | cAMP responsive element binding protein 1 | 91 | v |
| CREB5 | cAMP responsive element binding protein 5 | 83 | |
| CREBZF | CREB/ATF bZIP transcription factor | 67 | |
| CSF2RB | Colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) | 73 | |
| CTDSPL | CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small phosphatase-like | 98 | |
| CTNNA1 | Catenin (cadherin-associated protein), α 1, 102 kDa | 54 | |
| CTTNBP2NL | CTTNBP2 N-terminal like | 84 | |
| CTXN2 | Cortexin 2 | 56 | |
| CUL3 | Cullin 3 | 75 | |
| CXCL1 | Chemokine (C-X-C motif) ligand 1 (melanoma growth stimulating activity, α) | 61 | |
| CXCL2 | Chemokine (C-X-C motif) ligand 2 | 61 | |
| CXorf23 | Chromosome X open reading frame 23 | 58 | |
| CYB561D1 | Cytochrome b-561 domain containing 1 | 63 | |
| CYR61 | Cysteine-rich, angiogenic inducer, 61 | 56 | |
| DARS | Aspartyl-tRNA synthetase | 71 | |
| DAZAP2 | DAZ associated protein 2 | 69 | |
| DCBLD2 | Discoidin, CUB and LCCL domain containing 2 | 58 | |
| DCLK1 | Doublecortin-like kinase 1 | 71 | |
| DCLK3 | Doublecortin-like kinase 3 | 56 | |
| DCN | Decorin | 80 | |
| DCUN1D5 | DCN1, defective in cullin neddylation 1, domain containing 5 (<i>S. cerevisiae</i>) | 54 | |
| DDIT4 | DNA-damage-inducible transcript 4 | 53 | |
| DDX20 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 20 | 52 | |
| DDX3X | DEAD (Asp-Glu-Ala-Asp) box polypeptide 3, X-linked | 98 | |
| DDX3Y | DEAD (Asp-Glu-Ala-Asp) box polypeptide 3, Y-linked | 83 | |
| DDX52 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 52 | 83 | |
| DDX60L | DEAD (Asp-Glu-Ala-Asp) box polypeptide 60-like | 58 | |
| DEPTOR | DEP domain containing MTOR-interacting protein | 80 | |

| | | | |
|-----------------|--|----|---|
| DERL1 | Der1-like domain family, member 1 | 70 | |
| DGKH | Diacylglycerol kinase, eta | 51 | |
| DHX29 | DEAH (Asp-Glu-Ala-His) box polypeptide 29 | 61 | |
| DHX57 | DEAH (Asp-Glu-Ala-Asp/His) box polypeptide 57 | 58 | |
| DIP2B | DIP2 disco-interacting protein 2 homolog B (Drosophila) | 56 | |
| DIP2C | DIP2 disco-interacting protein 2 homolog C (Drosophila) | 60 | |
| DIRAS3 | DIRAS family, GTP-binding RAS-like 3 | 72 | |
| DLGAP1 | Discs, large (Drosophila) homolog-associated protein 1 | 51 | |
| DLGAP2 | Discs, large (Drosophila) homolog-associated protein 2 | 97 | |
| DMGDH | Dimethylglycine dehydrogenase | 65 | |
| DMXL2 | Dmx-like 2 | 50 | |
| DNAH8 | Dynein, axonemal, heavy chain 8 | 63 | |
| DNAJA4 | DnaJ (Hsp40) homolog, subfamily A, member 4 | 67 | |
| DNAJC13 | DnaJ (Hsp40) homolog, subfamily C, member 13 | 73 | |
| DOCK10 | Dedicator of cytokinesis 10 | 72 | |
| DOCK4 | Dedicator of cytokinesis 4 | 54 | |
| DOCK7 | Dedicator of cytokinesis 7 | 62 | |
| DPY19L1 | Dpy-19-like 1 (<i>C. elegans</i>) | 67 | |
| DPYSL2 | Dihydropyrimidinase-like 2 | 57 | |
| DSC3 | Desmocollin 3 | 79 | |
| DYNC1LI2 | Dynein, cytoplasmic 1, light intermediate chain 2 | 83 | |
| DYNC2H1 | Dynein, cytoplasmic 2, heavy chain 1 | 55 | |
| DZANK1 | Double zinc ribbon and ankyrin repeat domains 1 | 72 | |
| E2F5 | E2F transcription factor 5, p130-binding | 87 | |
| E2F7 | E2F transcription factor 7 | 83 | |
| EED | Embryonic ectoderm development | 54 | |
| EFHA2 | EF-hand domain family, member A2 | 90 | |
| EHF | Ets homologous factor | 69 | |
| EIF2C4 | Eukaryotic translation initiation factor 2C, 4 | 58 | |
| EIF4A2 | Eukaryotic translation initiation factor 4A2 | 86 | v |
| ELAVL2 | ELAV (embryonic lethal, abnormal vision, Drosophila)-like 2 (Hu antigen B) | 58 | |
| ELAVL4 | ELAV (embryonic lethal, abnormal vision, Drosophila)-like 4 (Hu antigen D) | 66 | |
| EMB | Embigin | 85 | |

| | | | |
|-----------------|--|----|---|
| EN1 | Engrailed homeobox 1 | 55 | |
| EN2 | Engrailed homeobox 2 | 66 | |
| ENDOD1 | Endonuclease domain containing 1 | 51 | |
| ENPP1 | Ectonucleotide pyrophosphatase/phosphodiesterase 1 | 78 | |
| ENTPD6 | Ectonucleoside triphosphate diphosphohydrolase 6 (putative) | 54 | |
| EPC2 | Enhancer of polycomb homolog 2 (Drosophila) | 86 | |
| ERAP2 | Endoplasmic reticulum aminopeptidase 2 | 65 | |
| ERC2 | ELKS/RAB6-interacting/CAST family member 2 | 64 | |
| EREG | Epiregulin | 63 | |
| ERI1 | Exoribonuclease 1 | 58 | |
| ERMAP | Erythroblast membrane-associated protein (Scianna blood group) | 52 | |
| ESCO2 | Establishment of cohesion 1 homolog 2 (<i>S. cerevisiae</i>) | 64 | |
| ESM1 | Endothelial cell-specific molecule 1 | 63 | |
| ESR1 | Estrogen receptor 1 | 50 | |
| ETV6 | Ets variant 6 | 81 | v |
| EVI2A | Ecotropic viral integration site 2A | 57 | |
| EXD1 | Exonuclease 3'-5' domain containing 1 | 75 | |
| EXOC2 | Exocyst complex component 2 | 50 | |
| EXOC5 | Exocyst complex component 5 | 61 | |
| EYS | Eyes shut homolog (Drosophila) | 80 | |
| F11 | Coagulation factor XI | 53 | |
| F2R | Coagulation factor II (thrombin) receptor | 51 | |
| F5 | Coagulation factor V (proaccelerin, labile factor) | 61 | |
| FAM105B | Family with sequence similarity 105, member B | 65 | |
| FAM135A | Family with sequence similarity 135, member A | 56 | |
| FAM13B | Family with sequence similarity 13, member B | 73 | |
| FAM160A2 | Family with sequence similarity 160, member A2 | 70 | |
| FAM178A | Family with sequence similarity 178, member A | 54 | |
| FAM179B | Family with sequence similarity 179, member B | 60 | |
| FAM3C | Family with sequence similarity 3, member C | 68 | |
| FAM70A | Family with sequence similarity 70, member A | 50 | |
| FAM82B | Family with sequence similarity 82, member B | 50 | |
| FAN1 | FANCD2/FANCI-associated nuclease 1 | 71 | |

| | | | |
|---------------|--|----|---|
| FAS | Fas (TNF receptor superfamily, member 6) | 59 | v |
| FAT3 | FAT tumor suppressor homolog 3 (Drosophila) | 65 | |
| FBN2 | Fibrillin 2 | 63 | |
| FBXL3 | F-box and leucine-rich repeat protein 3 | 59 | |
| FBXO33 | F-box protein 33 | 71 | |
| FBXO34 | F-box protein 34 | 97 | |
| FBXO45 | F-box protein 45 | 63 | |
| FHAD1 | Forkhead-associated (FHA) phosphopeptide binding domain 1 | 50 | |
| FIGN | Fidgetin | 98 | |
| FKBP1A | FK506 binding protein 1A, 12 kDa | 76 | |
| FLT1 | Fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor) | 70 | |
| FLVCR1 | Feline leukemia virus subgroup C cellular receptor 1 | 57 | |
| FMNL2 | Formin-like 2 | 76 | |
| FNBP4 | Formin binding protein 4 | 67 | |
| FNDC3B | Fibronectin type III domain containing 3B | 81 | |
| FNIP1 | Folliculin interacting protein 1 | 55 | |
| FO XK1 | Forkhead box K1 | 63 | |
| FOXP1 | Forkhead box P1 | 72 | v |
| FRMD7 | FERM domain containing 7 | 56 | |
| FUCA1 | Fucosidase, alpha-L- 1, tissue | 71 | |
| FUT1 | Fucosyltransferase 1 (galactoside 2- α -L-fucosyltransferase, H blood group) | 51 | |
| FUT9 | Fucosyltransferase 9 (α (1,3) fucosyltransferase) | 98 | |
| FZD3 | Frizzled family receptor 3 | 67 | |
| G3BP2 | GTPase activating protein (SH3 domain) binding protein 2 | 80 | |
| GAB1 | GRB2-associated binding protein 1 | 69 | |
| GABRA1 | γ -Aminobutyric acid (GABA) A receptor, alpha 1 | 92 | |
| GABRA4 | γ -Aminobutyric acid (GABA) A receptor, alpha 4 | 58 | |
| GALNT4 | UDP-N-acetyl- α -D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 4 (GalNAc-T4) | 66 | |
| GAPT | GRB2-binding adaptor protein, transmembrane | 50 | |
| GAPVD1 | GTPase activating protein and VPS9 domains 1 | 79 | |
| GAS7 | Growth arrest-specific 7 | 50 | v |

| | | | |
|------------------|---|----|--|
| GATA6 | GATA binding protein 6 | 74 | |
| GATM | Glycine amidinotransferase (L-arginine:glycine amidinotransferase) | 93 | |
| GCC2 | GRIP and coiled-coil domain containing 2 | 75 | |
| GCFC1 | GC-rich sequence DNA-binding factor 1 | 75 | |
| GDA | Guanine deaminase | 61 | |
| GFPT1 | Glutamine--fructose-6-phosphate transaminase 1 | 99 | |
| GGCT | γ -Glutamylcyclotransferase | 52 | |
| GHITM | Growth hormone inducible transmembrane protein | 85 | |
| GIMAP1 | GTPase, IMAP family member 1 | 81 | |
| GLDN | Gliomedin | 66 | |
| GLRX | Glutaredoxin (thioltransferase) | 68 | |
| GLS | Glutaminase | 52 | |
| GNA12 | Guanine nucleotide binding protein (G protein) α 12 | 56 | |
| GNB4 | Guanine nucleotide binding protein (G protein), β polypeptide 4 | 69 | |
| GOLGA6C | Golgin A6 family, member C | 53 | |
| GOLGA6L10 | Golgin A6 family-like 10 | 53 | |
| GP5 | Glycoprotein V (platelet) | 62 | |
| GPBP1 | GC-rich promoter binding protein 1 | 92 | |
| GPCPD1 | Glycerophosphocholine phosphodiesterase GDE1 homolog (<i>S. cerevisiae</i>) | 65 | |
| GPD1L | Glycerol-3-phosphate dehydrogenase 1-like | 86 | |
| GPD2 | Glycerol-3-phosphate dehydrogenase 2 (mitochondrial) | 85 | |
| GPR137C | G protein-coupled receptor 137C | 60 | |
| GPR26 | G protein-coupled receptor 26 | 98 | |
| GPR83 | G protein-coupled receptor 83 | 68 | |
| GPR88 | G protein-coupled receptor 88 | 53 | |
| GPRIN3 | GPRIN family member 3 | 82 | |
| GPSM1 | G-protein signaling modulator 1 | 55 | |
| GPX8 | Glutathione peroxidase 8 (putative) | 81 | |
| GRB10 | Growth factor receptor-bound protein 10 | 76 | |
| GREM1 | Gremlin 1 | 70 | |
| GRIN2A | Glutamate receptor, ionotropic, <i>N</i> -methyl D-aspartate 2A | 66 | |
| GRM5 | Glutamate receptor, metabotropic 5 | 75 | |
| GSTCD | Glutathione <i>S</i> -transferase, C-terminal domain containing | 58 | |

| | | | |
|----------------|---|----|---|
| GTF2H5 | General transcription factor IIH, polypeptide 5 | 53 | |
| GYP A | Glycophorin A (MNS blood group) | 57 | |
| H2AFV | H2A histone family, member V | 65 | |
| HAO1 | Hydroxyacid oxidase (glycolate oxidase) 1 | 53 | |
| HAUS3 | HAUS augmin-like complex, subunit 3 | 67 | |
| HCN1 | Hyperpolarization activated cyclic nucleotide-gated potassium channel 1 | 71 | |
| HDHD1 | Haloacid dehalogenase-like hydrolase domain containing 1 | 64 | |
| HEATR3 | HEAT repeat containing 3 | 54 | |
| HECA | Headcase homolog (Drosophila) | 62 | |
| HEMGN | Hemogen | 63 | |
| HEPHL1 | Hephaestin-like 1 | 65 | |
| HEY2 | Hairy/enhancer-of-split related with YRPW motif 2 | 76 | |
| HHLA1 | HERV-H LTR-associating 1 | 52 | |
| HIC2 | Hypermethylated in cancer 2 | 78 | |
| HK2 | Hexokinase 2 | 61 | |
| HLF | Hepatic leukemia factor | 56 | v |
| HMBS | Hydroxymethylbilane synthase | 58 | |
| HMGB2 | High mobility group box 2 | 55 | |
| HOOK1 | Hook homolog 1 (Drosophila) | 75 | |
| HOOK3 | Hook homolog 3 (Drosophila) | 73 | v |
| HOXA1 | Homeobox A1 | 68 | |
| HOXA11 | Homeobox A11 | 66 | v |
| HOXB4 | Homeobox B4 | 67 | |
| HOXC8 | Homeobox C8 | 71 | |
| HOXD1 | Homeobox D1 | 76 | |
| HOXD3 | Homeobox D3 | 59 | |
| HRH1 | Histamine receptor H1 | 85 | |
| HS6ST3 | Heparan sulfate 6-O-sulfotransferase 3 | 60 | |
| HSP90B1 | Heat shock protein 90 kDa β (Grp94), member 1 | 56 | |
| IFNA4 | Interferon, α 4 | 55 | |
| IIFT74 | Intraflagellar transport 74 homolog (Chlamydomonas) | 53 | |
| IIFT81 | Intraflagellar transport 81 homolog (Chlamydomonas) | 52 | |
| IGF2BP2 | Insulin-like growth factor 2 mRNA binding protein 2 | 55 | |

| | | | |
|---------------|---|----|---|
| IGSF11 | Immunoglobulin superfamily, member 11 | 65 | |
| IL1A | Interleukin 1 α | 69 | |
| IL1RAP | Interleukin 1 receptor accessory protein | 54 | |
| IL2 | Interleukin 2 | 81 | v |
| IL25 | Interleukin 25 | 61 | |
| ILF3 | Interleukin enhancer binding factor 3, 90 kDa | 55 | |
| INO80 | INO80 homolog (<i>S. cerevisiae</i>) | 82 | |
| INO80D | INO80 complex subunit D | 86 | |
| INPP4A | Inositol polyphosphate-4-phosphatase, type I, 107 kDa | 81 | |
| INPP5A | Inositol polyphosphate-5-phosphatase, 40 kDa | 61 | |
| INPP5E | Inositol polyphosphate-5-phosphatase, 72 kDa | 50 | |
| IPMK | Inositol polyphosphate multikinase | 80 | |
| IPO5 | Importin 5 | 57 | |
| IPO7 | Importin 7 | 78 | |
| IPO8 | Importin 8 | 90 | |
| IRF5 | Interferon regulatory factor 5 | 52 | |
| IRS2 | Insulin receptor substrate 2 | 62 | |
| ITGA2 | Integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor) | 77 | |
| ITGB8 | Integrin, beta 8 | 63 | |
| ITSN1 | Intersectin 1 (SH3 domain protein) | 85 | |
| JAM3 | Junctional adhesion molecule 3 | 59 | |
| JAZF1 | JAZF zinc finger 1 | 76 | v |
| KALRN | Kalirin, RhoGEF kinase | 61 | |
| KANK1 | KN motif and ankyrin repeat domains 1 | 72 | |
| KAT2B | K(lysine) acetyltransferase 2B | 67 | |
| KCNA4 | Potassium voltage-gated channel, shaker-related subfamily, member 4 | 77 | |
| KCNH1 | Potassium voltage-gated channel, subfamily H (eag-related), member 1 | 86 | |
| KCNH8 | Potassium voltage-gated channel, subfamily H (eag-related), member 8 | 78 | |
| KCNK10 | Potassium channel, subfamily K, member 10 | 52 | |
| KCNMB2 | Potassium large conductance calcium-activated channel, subfamily M, beta member 2 | 58 | |
| KCNN3 | Potassium intermediate/small conductance calcium-activated channel, subfamily N, member 3 | 66 | |
| KCNQ5 | Potassium voltage-gated channel, KQT-like subfamily, member 5 | 91 | |

| | | | |
|------------------|---|----|---|
| KCTD3 | Potassium channel tetramerisation domain containing 3 | 71 | |
| KDM4C | Lysine (K)-specific demethylase 4C | 60 | |
| KDM5A | Lysine (K)-specific demethylase 5A | 84 | v |
| KIAA0195 | KIAA0195 | 85 | |
| KIAA0196 | KIAA0196 | 54 | |
| KIAA0247 | KIAA0247 | 53 | |
| KIAA0528 | KIAA0528 | 97 | |
| KIAA0825 | KIAA0825 | 66 | |
| KIAA1239 | KIAA1239 | 82 | |
| KIAA1244 | KIAA1244 | 64 | |
| KIAA1324L | KIAA1324-like | 62 | |
| KIAA1715 | KIAA1715 | 54 | |
| KIAA2022 | KIAA2022 | 57 | |
| KIF3A | Kinesin family member 3A | 93 | |
| KIF3B | Kinesin family member 3B | 60 | |
| KITLG | KIT ligand | 66 | |
| KLF15 | Kruppel-like factor 15 | 56 | |
| KLF3 | Kruppel-like factor 3 (basic) | 52 | |
| KLF6 | Kruppel-like factor 6 | 95 | |
| KLHDC5 | Kelch domain containing 5 | 58 | |
| KLHL2 | Kelch-like 2, Mayven (Drosophila) | 86 | |
| KLHL29 | Kelch-like 29 (Drosophila) | 72 | |
| KLHL5 | Kelch-like 5 (Drosophila) | 87 | |
| KPNA1 | Karyopherin α 1 (importin α 5) | 56 | |
| KPNA4 | Karyopherin α 4 (importin α 3) | 76 | |
| KPNB1 | Karyopherin (importin) β 1 | 69 | |
| KRAS | V-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog | 86 | |
| KRIT1 | KRIT1, ankyrin repeat containing | 52 | |
| LAMP2 | Lysosomal-associated membrane protein 2 | 78 | |
| LAPTM4B | Lysosomal protein transmembrane 4 β | 66 | |
| LARP4 | La ribonucleoprotein domain family, member 4 | 97 | |
| LBR | Lamin B receptor | 63 | |
| LCLAT1 | Lysocardiolipin acyltransferase 1 | 64 | |

| | | | |
|---------------------|---|----|---|
| LCOR | Ligand dependent nuclear receptor corepressor | 62 | |
| LCTL | Lactase-like | 69 | |
| LEPROT | Leptin receptor overlapping transcript | 52 | |
| LGALSL | Lectin, galactoside-binding-like | 76 | |
| LHFPL3 | Lipoma HMGIC fusion partner-like 3 | 75 | |
| LIFR | Leukemia inhibitory factor receptor alpha | 79 | v |
| LIN28A | Lin-28 homolog A (<i>C. elegans</i>) | 62 | |
| LIN28B | Lin-28 homolog B (<i>C. elegans</i>) | 60 | |
| LMAN1 | Lectin, mannose-binding, 1 | 66 | |
| LMBRD2 | LMBR1 domain containing 2 | 85 | |
| LMO3 | LIM domain only 3 (rhombotin-like 2) | 73 | |
| LOC100506012 | Serine/threonine-protein phosphatase 5-like | 68 | |
| LOC100507203 | Uncharacterized LOC100507203 | 80 | |
| LOC100653112 | Heparan-sulfate 6-O-sulfotransferase 3-like | 60 | |
| LOC100653234 | Uncharacterized LOC100653234 | 76 | |
| LOC100653247 | Dual specificity protein phosphatase 22-like | 58 | |
| LOC731932 | Uncharacterized LOC731932 | 53 | |
| LONRF1 | LON peptidase N-terminal domain and ring finger 1 | 55 | |
| LONRF2 | LON peptidase N-terminal domain and ring finger 2 | 74 | |
| LOX | Lysyl oxidase | 75 | |
| LPCAT2 | Lysophosphatidylcholine acyltransferase 2 | 81 | |
| LPP | LIM domain containing preferred translocation partner in lipoma | 77 | v |
| LRBA | LPS-responsive vesicle trafficking, beach and anchor containing | 65 | |
| LRP12 | Low density lipoprotein receptor-related protein 12 | 53 | |
| LRRC32 | Leucine rich repeat containing 32 | 75 | |
| LRRC8D | Leucine rich repeat containing 8 family, member D | 86 | |
| LRRN1 | Leucine rich repeat neuronal 1 | 70 | |
| LTV1 | LTV1 homolog (<i>S. cerevisiae</i>) | 54 | |

| | | | |
|-------------------|---|----|---|
| LY75-CD302 | LY75-CD302 readthrough | 73 | |
| LYRM1 | LYR motif containing 1 | 68 | |
| MAB21L3 | Mab-21-like 3 (<i>C. elegans</i>) | 57 | |
| MAGEA4 | Melanoma antigen family A, 4 | 51 | |
| MAGOHB | Mago-nashi homolog B (<i>Drosophila</i>) | 68 | |
| MAMDC2 | MAM domain containing 2 | 61 | |
| MAP1B | Microtubule-associated protein 1B | 69 | |
| MAP2K1 | Mitogen-activated protein kinase kinase 1 | 60 | v |
| MAP2K4 | Mitogen-activated protein kinase kinase 4 | 57 | v |
| MAP3K3 | Mitogen-activated protein kinase kinase kinase 3 | 51 | |
| MAP3K8 | Mitogen-activated protein kinase kinase kinase 8 | 55 | |
| MAPK1 | Mitogen-activated protein kinase 1 | 73 | |
| MAPK1IP1L | Mitogen-activated protein kinase 1 interacting protein 1-like | 65 | |
| MARC2 | Mitochondrial amidoxime reducing component 2 | 70 | |
| MARK1 | MAP/microtubule affinity-regulating kinase 1 | 73 | |
| MASP1 | Mannan-binding lectin serine peptidase 1 (C4/C2 activating component of Ra-reactive factor) | 52 | |
| MAT2A | Methionine adenosyltransferase Iia | 51 | |
| MATN3 | Matrilin 3 | 79 | |
| MB21D2 | Mab-21 domain containing 2 | 72 | |
| MBLAC2 | Metallo- β -lactamase domain containing 2 | 80 | |
| MBNL1 | Muscleblind-like (<i>Drosophila</i>) | 70 | |
| MBOAT2 | Membrane bound <i>O</i> -acyltransferase domain containing 2 | 73 | |
| MBTPS2 | Membrane-bound transcription factor peptidase, site 2 | 68 | |
| MCC | Mutated in colorectal cancers | 57 | |
| MCTP2 | Multiple C2 domains, transmembrane 2 | 64 | |
| MCTS1 | Malignant T cell amplified sequence 1 | 67 | |
| MDH1B | Malate dehydrogenase 1B, NAD (soluble) | 59 | |
| MDM4 | Mdm4 p53 binding protein homolog (mouse) | 53 | v |
| MED12L | Mediator complex subunit 12-like | 74 | |
| MED20 | Mediator complex subunit 20 | 54 | |
| MED8 | Mediator complex subunit 8 | 76 | |
| MEGF10 | Multiple EGF-like-domains 10 | 52 | |

| | | | |
|----------------|---|----|---|
| MEGF9 | Multiple EGF-like-domains 9 | 72 | |
| MELK | Maternal embryonic leucine zipper kinase | 70 | |
| MET | Met proto-oncogene (hepatocyte growth factor receptor) | 50 | v |
| METAP1 | Methionyl aminopeptidase 1 | 95 | |
| METAP2 | Methionyl aminopeptidase 2 | 82 | |
| METTL20 | Methyltransferase like 20 | 60 | |
| MFSD6 | Major facilitator superfamily domain containing 6 | 61 | |
| MIA2 | Melanoma inhibitory activity 2 | 57 | |
| MID2 | Midline 2 | 73 | |
| MIER3 | Mesoderm induction early response 1, family member 3 | 76 | |
| MINA | MYC induced nuclear antigen | 70 | |
| MIP | Major intrinsic protein of lens fiber | 61 | |
| MKLN1 | Muskelin 1, intracellular mediator containing kelch motifs | 73 | |
| MKRN1 | Makorin ring finger protein 1 | 55 | |
| MLL | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila) | 97 | v |
| MLL3 | Myeloid/lymphoid or mixed-lineage leukemia 3 | 55 | v |
| MLL5 | Myeloid/lymphoid or mixed-lineage leukemia 5 (trithorax homolog, Drosophila) | 62 | |
| MLLT10 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 10 | 63 | v |
| MME | Membrane metallo-endopeptidase | 61 | |
| MORC3 | MORC family CW-type zinc finger 3 | 75 | |
| MOSPD1 | Motile sperm domain containing 1 | 69 | |
| MPP5 | Membrane protein, palmitoylated 5 (MAGUK p55 subfamily member 5) | 84 | |
| MPP7 | Membrane protein, palmitoylated 7 (MAGUK p55 subfamily member 7) | 68 | |
| MRPL13 | Mitochondrial ribosomal protein L13 | 66 | |
| MRPS16 | Mitochondrial ribosomal protein S16 | 64 | |
| MRPS35 | Mitochondrial ribosomal protein S35 | 68 | |
| MTF2 | Metal response element binding transcription factor 2 | 89 | |
| MTMR12 | Myotubularin related protein 12 | 88 | |
| MTMR9 | Myotubularin related protein 9 | 52 | |
| MTUS1 | Microtubule associated tumor suppressor 1 | 66 | |
| MTX3 | Metaxin 3 | 78 | |
| MUC7 | Mucin 7, secreted | 84 | |

| | | | |
|-----------------|---|----|---|
| MYH15 | Myosin, heavy chain 15 | 56 | |
| MYO1E | Myosin IE | 57 | |
| MYSM1 | Myb-like, SWIRM and MPN domains 1 | 68 | |
| NAAA | <i>N</i> -acylethanolamine acid amidase | 51 | |
| NAALADL2 | <i>N</i> -acetylated α -linked acidic dipeptidase-like 2 | 58 | |
| NAP1L1 | Nucleosome assembly protein 1-like 1 | 54 | |
| NARG2 | NMDA receptor regulated 2 | 80 | |
| NCOA2 | Nuclear receptor coactivator 2 | 74 | v |
| NDRG4 | NDRG family member 4 | 52 | |
| NDUFAF4 | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, assembly factor 4 | 50 | |
| NEK2 | NIMA (never in mitosis gene a)-related kinase 2 | 52 | |
| NEK7 | NIMA (never in mitosis gene a)-related kinase 7 | 82 | |
| NFAT5 | Nuclear factor of activated T-cells 5, tonicity-responsive | 99 | |
| NFATC2IP | Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 interacting protein | 59 | |
| NFIB | Nuclear factor I/B | 60 | v |
| NFYB | Nuclear transcription factor Y, β | 51 | |
| NIPAL4 | NIPA-like domain containing 4 | 56 | |
| NKAIN2 | Na ⁺ /K ⁺ transporting ATPase interacting 2 | 66 | |
| NLN | Neurolysin (metallopeptidase M3 family) | 88 | |
| NMT2 | N-myristoyltransferase 2 | 51 | |
| NOTCH2 | Notch 2 | 65 | v |
| NOTCH4 | Notch 4 | 74 | |
| NOVA1 | Neuro-oncological ventral antigen 1 | 94 | |
| NPTXR | Neuronal pentraxin receptor | 65 | |
| NR1D2 | Nuclear receptor subfamily 1, group D, member 2 | 55 | |
| NR2C2 | Nuclear receptor subfamily 2, group C, member 2 | 53 | |
| NR3C1 | Nuclear receptor subfamily 3, group C, member 1 (glucocorticoid receptor) | 77 | |
| NR4A3 | Nuclear receptor subfamily 4, group A, member 3 | 63 | v |
| NR6A1 | Nuclear receptor subfamily 6, group A, member 1 | 66 | |
| NRAS | Neuroblastoma RAS viral (v-ras) oncogene homolog | 72 | v |
| NRXN1 | Neurexin 1 | 53 | |
| NSUN7 | NOP2/Sun domain family, member 7 | 60 | |

| | | | |
|-----------------|---|----|---|
| NTS | Neurotensin | 73 | |
| NUCKS1 | Nuclear casein kinase and cyclin-dependent kinase substrate 1 | 50 | |
| NUDT12 | Nudix (nucleoside diphosphate linked moiety X)-type motif 12 | 82 | |
| NUDT21 | Nudix (nucleoside diphosphate linked moiety X)-type motif 21 | 65 | |
| NUDT4 | Nudix (nucleoside diphosphate linked moiety X)-type motif 4 | 53 | |
| NUFIP1 | Nuclear fragile X mental retardation protein interacting protein 1 | 70 | |
| NUFIP2 | Nuclear fragile X mental retardation protein interacting protein 2 | 54 | |
| O3FAR1 | ω 3-Fatty acid receptor 1 | 51 | |
| OCIAD1 | OCIA domain containing 1 | 64 | |
| OGFRL1 | Opioid growth factor receptor-like 1 | 61 | |
| ONECUT2 | One cut homeobox 2 | 86 | |
| OSBPL2 | Oxysterol binding protein-like 2 | 50 | |
| OSBPL3 | Oxysterol binding protein-like 3 | 99 | |
| OSBPL8 | Oxysterol binding protein-like 8 | 86 | |
| OTUD4 | OTU domain containing 4 | 77 | |
| OXGR1 | Oxoglutarate (alpha-ketoglutarate) receptor 1 | 56 | |
| PABPC5 | Poly(A) binding protein, cytoplasmic 5 | 87 | |
| PAFAH1B2 | Platelet-activating factor acetylhydrolase 1b, catalytic subunit 2 (30 kDa) | 62 | |
| PAG1 | Phosphoprotein associated with glycosphingolipid microdomains 1 | 57 | |
| PALM2 | Paralemmin 2 | 56 | |
| PAM | Peptidylglycine alpha-amidating monooxygenase | 97 | |
| PAPD5 | PAP associated domain containing 5 | 99 | |
| PAPOLG | Poly(A) polymerase gamma | 78 | |
| PARK2 | Parkinson protein 2, E3 ubiquitin protein ligase (parkin) | 77 | |
| PARM1 | Prostate androgen-regulated mucin-like protein 1 | 66 | |
| PARP11 | Poly (ADP-ribose) polymerase family, member 11 | 74 | |
| PAWR | PRKC, apoptosis, WT1, regulator | 72 | |
| PAX6 | Paired box 6 | 55 | |
| PAX9 | Paired box 9 | 77 | |
| PBX1 | Pre-B-cell leukemia homeobox 1 | 56 | v |
| PBX3 | Pre-B-cell leukemia homeobox 3 | 51 | |
| PCDH11Y | Protocadherin 11 Y-linked | 66 | |
| PCDH15 | Protocadherin-related 15 | 54 | |

| | | | |
|----------------|---|-----|---|
| PCDHA1 | Protocadherin α 1 | 80 | |
| PCDHA10 | Protocadherin α 10 | 80 | |
| PCDHA11 | Protocadherin α 11 | 80 | |
| PCDHA12 | Protocadherin α 12 | 80 | |
| PCDHA13 | Protocadherin α 13 | 80 | |
| PCDHA2 | protocadherin α 2 | 80 | |
| PCDHA3 | Protocadherin α 3 | 80 | |
| PCDHA4 | Protocadherin α 4 | 80 | |
| PCDHA5 | Protocadherin α 5 | 80 | |
| PCDHA6 | Protocadherin α 6 | 80 | |
| PCDHA7 | Protocadherin α 7 | 80 | |
| PCDHA8 | Protocadherin α 8 | 72 | |
| PCDHA9 | Protocadherin α 9 | 72 | |
| PCDHAC1 | Protocadherin α subfamily C, 1 | 80 | |
| PCDHAC2 | Protocadherin α subfamily C, 2 | 95 | |
| PCGF3 | Polycomb group ring finger 3 | 52 | |
| PCID2 | PCI domain containing 2 | 70 | |
| PCNP | PEST proteolytic signal containing nuclear protein | 82 | |
| PCSK1 | Proprotein convertase subtilisin/kexin type 1 | 58 | |
| PDAP1 | PDGFA associated protein 1 | 63 | |
| PDCD6IP | Programmed cell death 6 interacting protein | 59 | |
| PDE5A | Phosphodiesterase 5A, cGMP-specific | 100 | |
| PDGFRA | Platelet-derived growth factor receptor, α polypeptide | 69 | v |
| PDK1 | Pyruvate dehydrogenase kinase, isozyme 1 | 52 | |
| PEAK1 | NKF3 kinase family member | 67 | |
| PER3 | Period homolog 3 (Drosophila) | 83 | |
| PET117 | Cytochrome c oxidase assembly factor-like | 59 | |
| PEX13 | Peroxisomal biogenesis factor 13 | 62 | |
| PGAP1 | Post-GPI attachment to proteins 1 | 95 | |
| PGPEP1L | Pyroglutamyl-peptidase I-like | 52 | |
| PGR | Progesterone receptor | 62 | |
| PHACTR2 | Phosphatase and actin regulator 2 | 69 | |
| PHACTR4 | Phosphatase and actin regulator 4 | 57 | |

| | | | |
|---------------------|--|----|---|
| PHC3 | Polyhomeotic homolog 3 (Drosophila) | 71 | |
| PHF20L1 | PHD finger protein 20-like 1 | 87 | |
| PHF3 | PHD finger protein 3 | 55 | |
| PHLPP2 | PH domain and leucine rich repeat protein phosphatase 2 | 73 | |
| PHTF2 | Putative homeodomain transcription factor 2 | 70 | |
| PI4K2B | Phosphatidylinositol 4-kinase type 2 β | 85 | |
| PIK3C2A | Phosphoinositide-3-kinase, class 2, α polypeptide | 65 | |
| PIK3R3 | Phosphoinositide-3-kinase, regulatory subunit 3 γ | 58 | |
| PITPNB | Phosphatidylinositol transfer protein, beta | 75 | |
| PKNOX1 | PBX/knotted 1 homeobox 1 | 69 | |
| PKNOX2 | PBX/knotted 1 homeobox 2 | 71 | |
| PKP2 | Plakophilin 2 | 67 | |
| PLA2G4C | Phospholipase A2, group IVC (cytosolic, calcium-independent) | 57 | |
| PLAC1L | Placenta-specific 1-like | 83 | |
| PLAG1 | Pleiomorphic adenoma gene 1 | 61 | v |
| PLAU | Plasminogen activator, urokinase | 67 | |
| PLCL2 | Phospholipase C-like 2 | 67 | |
| PLD1 | Phospholipase D1, phosphatidylcholine-specific | 55 | |
| PLDN | Pallidin homolog (mouse) | 70 | |
| PLEKHA3 | Pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 3 | 88 | |
| PLEKHA8 | Pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 8 | 66 | |
| PLG | Plasminogen | 82 | |
| PLSCR5 | Phospholipid scramblase family, member 5 | 55 | |
| PMAIP1 | Phorbol-12-myristate-13-acetate-induced protein 1 | 50 | |
| PNMA1 | Paraneoplastic antigen MA1 | 56 | |
| PNPT1 | Polyribonucleotide nucleotidyltransferase 1 | 53 | |
| PNRC2 | Proline-rich nuclear receptor coactivator 2 | 72 | |
| POC1B-GALNT4 | POC1B-GALNT4 readthrough | 55 | |
| POLI | Polymerase (DNA directed) iota | 68 | |
| POLQ | Polymerase (DNA directed), theta | 81 | |

| | | | |
|-----------------|--|----|--|
| POLR3G | Polymerase (RNA) III (DNA directed) polypeptide G (32 kD) | 70 | |
| POM121 | POM121 membrane glycoprotein | 81 | |
| POM121C | POM121 membrane glycoprotein C | 73 | |
| POMC | Proopiomelanocortin | 53 | |
| POU2F1 | POU class 2 homeobox 1 | 68 | |
| PPARA | Peroxisome proliferator-activated receptor- α | 54 | |
| PPFIA1 | Protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein (liprin), α 1 | 53 | |
| PPP5K2 | Diphosphoinositol pentakisphosphate kinase 2 | 63 | |
| PPP1R12B | Protein phosphatase 1, regulatory subunit 12B | 90 | |
| PPP1R3B | Protein phosphatase 1, regulatory subunit 3B | 68 | |
| PPP1R3C | Protein phosphatase 1, regulatory subunit 3C | 64 | |
| PPP1R3D | Protein phosphatase 1, regulatory subunit 3D | 57 | |
| PPP1R9A | Protein phosphatase 1, regulatory subunit 9A | 72 | |
| PPP2R5E | Protein phosphatase 2, regulatory subunit B', epsilon isoform | 72 | |
| PPP3R1 | Protein phosphatase 3, regulatory subunit B, α | 60 | |
| PRDM4 | PR domain containing 4 | 71 | |
| PRDX3 | Peroxiredoxin 3 | 84 | |
| PRH2 | Proline-rich protein HaeIII subfamily 2 | 79 | |
| PRKCD | Protein kinase C, δ | 70 | |
| PRKCE | Protein kinase C, epsilon | 58 | |
| PRKG1 | Protein kinase, cGMP-dependent, type I | 89 | |
| PRLR | Prolactin receptor | 72 | |
| PROCR | Protein C receptor, endothelial | 51 | |
| PROSER1 | Proline and serine rich 1 | 57 | |
| PRR20A | Proline rich 20A | 52 | |
| PRR20B | Proline rich 20B | 52 | |
| PRR20C | Proline rich 20C | 52 | |
| PRR20D | Proline rich 20D | 52 | |
| PRR20E | Proline rich 20E | 52 | |
| PRRC1 | Proline-rich coiled-coil 1 | 53 | |
| PRRC2C | Proline-rich coiled-coil 2C | 52 | |
| PRRG4 | Proline rich Gla (G-carboxyglutamic acid) 4 (transmembrane) | 58 | |

| | | | |
|-----------------|---|-----|---|
| PRSS16 | Protease, serine, 16 (thymus) | 56 | |
| PRTG | Protogenin | 100 | |
| PSG11 | Pregnancy specific β -1-glycoprotein 11 | 67 | |
| PSG3 | Pregnancy specific β -1-glycoprotein 3 | 67 | |
| PSG5 | Pregnancy specific β -1-glycoprotein 5 | 70 | |
| PSG9 | Pregnancy specific β -1-glycoprotein 9 | 64 | |
| PSRC1 | Proline/serine-rich coiled-coil 1 | 71 | |
| PTBP2 | Polypyrimidine tract binding protein 2 | 64 | |
| PTBP3 | Polypyrimidine tract binding protein 3 | 75 | |
| PTGER3 | Prostaglandin E receptor 3 (subtype EP3) | 74 | |
| PTGS2 | Prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase) | 55 | |
| PTPN22 | Protein tyrosine phosphatase, non-receptor type 22 (lymphoid) | 69 | |
| PTPN9 | Protein tyrosine phosphatase, non-receptor type 9 | 64 | |
| PTPRB | Protein tyrosine phosphatase, receptor type, B | 55 | |
| QSER1 | Glutamine and serine rich 1 | 51 | |
| RAB11A | RAB11A, member RAS oncogene family | 72 | |
| RAB27B | RAB27B, member RAS oncogene family | 65 | |
| RAB3GAP1 | RAB3 GTPase activating protein subunit 1 (catalytic) | 77 | |
| RAB3IP | RAB3A interacting protein (rabin3) | 97 | |
| RAB40B | RAB40B, member RAS oncogene family | 56 | |
| RABGEF1 | RAB guanine nucleotide exchange factor (GEF) 1 | 58 | |
| RAD21 | RAD21 homolog (<i>S. pombe</i>) | 88 | v |
| RALGAPB | Ral GTPase activating protein, beta subunit (non-catalytic) | 82 | |
| RAP1B | RAP1B, member of RAS oncogene family | 85 | |
| RAP2A | RAP2A, member of RAS oncogene family | 70 | |
| RAPGEF4 | Rap guanine nucleotide exchange factor (GEF) 4 | 64 | |
| RASSF2 | Ras association (RalGDS/AF-6) domain family member 2 | 91 | |
| RASSF6 | Ras association (RalGDS/AF-6) domain family member 6 | 76 | |
| RASSF8 | Ras association (RalGDS/AF-6) domain family (N-terminal) member 8 | 53 | |
| RBBP7 | Retinoblastoma binding protein 7 | 70 | |
| RBM25 | RNA binding motif protein 25 | 86 | |
| RBM26 | RNA binding motif protein 26 | 74 | |
| RCOR1 | REST corepressor 1 | 52 | |

| | | | |
|----------------|---|----|--|
| RECK | Reversion-inducing-cysteine-rich protein with kazal motifs | 54 | |
| REEP1 | Receptor accessory protein 1 | 52 | |
| REPS2 | RALBP1 associated Eps domain containing 2 | 93 | |
| RFC1 | Replication factor C (activator 1) 1, 145 kDa | 80 | |
| RGPD1 | RANBP2-like and GRIP domain containing 1 | 84 | |
| RGS18 | Regulator of G-protein signaling 18 | 56 | |
| RGS5 | Regulator of G-protein signaling 5 | 65 | |
| RIMKLA | Ribosomal modification protein rimK-like family member A | 65 | |
| RIN2 | Ras and Rab interactor 2 | 75 | |
| RLF | Rearranged L-myc fusion | 93 | |
| RNF145 | Ring finger protein 145 | 69 | |
| RNF182 | Ring finger protein 182 | 64 | |
| RNF19A | Ring finger protein 19A | 58 | |
| RNF34 | Ring finger protein 34 | 83 | |
| RNF6 | Ring finger protein (C3H2C3 type) 6 | 65 | |
| RNF8 | Ring finger protein 8 | 81 | |
| RNMT | RNA (guanine-7-) methyltransferase | 68 | |
| ROBO2 | Roundabout, axon guidance receptor, homolog 2 (<i>Drosophila</i>) | 68 | |
| RORA | RAR-related orphan receptor A | 92 | |
| RPAP2 | RNA polymerase II associated protein 2 | 84 | |
| RPE65 | Retinal pigment epithelium-specific protein 65 kDa | 82 | |
| RPS6KB1 | Ribosomal protein S6 kinase, 70 kDa, polypeptide 1 | 74 | |
| RRP15 | Ribosomal RNA processing 15 homolog (<i>S. cerevisiae</i>) | 70 | |
| RUFY2 | RUN and FYVE domain containing 2 | 54 | |
| RYR3 | Ryanodine receptor 3 | 56 | |
| S1PR1 | Sphingosine-1-phosphate receptor 1 | 98 | |
| SAMD12 | Sterile α motif domain containing 12 | 81 | |
| SAMD9L | Sterile α motif domain containing 9-like | 74 | |
| SAMHD1 | SAM domain and HD domain 1 | 50 | |
| SCD | Stearoyl-CoA desaturase (δ -9-desaturase) | 94 | |
| SCN9A | Sodium channel, voltage-gated, type IX, alpha subunit | 58 | |
| SCOC | Short coiled-coil protein | 80 | |
| SEC24A | SEC24 family, member A (<i>S. cerevisiae</i>) | 57 | |

| | | | |
|-----------------|--|----|---|
| SEC24C | SEC24 family, member C (<i>S. cerevisiae</i>) | 79 | |
| SEL1L | Sel-1 suppressor of lin-12-like (<i>C. elegans</i>) | 71 | |
| SELK | Selenoprotein K | 51 | |
| SELT | Selenoprotein T | 64 | |
| SEMA3C | Sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C | 70 | |
| SEMA4G | Sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4G | 79 | |
| SENP1 | SUMO1/sentrin specific peptidase 1 | 61 | |
| SEPT8 | Septin 8 | 52 | |
| SERPINA1 | Serpin peptidase inhibitor, clade A (α -1 antiproteinase, antitrypsin), member 1 | 51 | |
| SERPINE1 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1 | 65 | |
| SH2B3 | SH2B adaptor protein 3 | 51 | v |
| SH2D4A | SH2 domain containing 4A | 58 | |
| SH3TC2 | SH3 domain and tetratricopeptide repeats 2 | 99 | |
| SHC3 | SHC (Src homology 2 domain containing) transforming protein 3 | 84 | |
| SHE | Src homology 2 domain containing E | 66 | |
| SHQ1 | SHQ1 homolog (<i>S. cerevisiae</i>) | 62 | |
| SIAE | Sialic acid acetyltransferase | 58 | |
| SIPA1L2 | Signal-induced proliferation-associated 1 like 2 | 89 | |
| SIRT1 | Sirtuin 1 | 79 | |
| SKP1 | S-phase kinase-associated protein 1 | 55 | |
| SLA | Src-like-adaptor | 62 | |
| SLAIN2 | SLAIN motif family, member 2 | 64 | |
| SLC10A7 | Solute carrier family 10 (sodium/bile acid cotransporter family), member 7 | 61 | |
| SLC11A1 | Solute carrier family 11 (proton-coupled divalent metal ion transporters), member 1 | 68 | |
| SLC16A6 | Solute carrier family 16, member 6 (monocarboxylic acid transporter 7) | 52 | |
| SLC19A2 | Solute carrier family 19 (thiamine transporter), member 2 | 78 | |
| SLC22A15 | Solute carrier family 22, member 15 | 58 | |
| SLC24A1 | Solute carrier family 24 (sodium/potassium/calcium exchanger), member 1 | 73 | |
| SLC25A24 | Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 24 | 78 | |
| SLC25A25 | Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25 | 57 | |
| SLC25A32 | Solute carrier family 25, member 32 | 57 | |
| SLC25A4 | Solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), member 4 | 53 | |

| | | | |
|-----------------|--|----|--|
| SLC26A4 | Solute carrier family 26, member 4 | 52 | |
| SLC2A1 | Solute carrier family 2 (facilitated glucose transporter), member 1 | 50 | |
| SLC35C2 | Solute carrier family 35, member C2 | 66 | |
| SLC38A11 | Solute carrier family 38, member 11 | 65 | |
| SLC38A2 | Solute carrier family 38, member 2 | 56 | |
| SLC3A1 | Solute carrier family 3 (cystine, dibasic and neutral amino acid transporters, activator of cystine, dibasic and neutral amino acid transport), member 1 | 50 | |
| SLC4A10 | Solute carrier family 4, sodium bicarbonate transporter, member 10 | 78 | |
| SLC4A8 | Solute carrier family 4, sodium bicarbonate cotransporter, member 8 | 66 | |
| SLC5A3 | Solute carrier family 5 (sodium/myo-inositol cotransporter), member 3 | 63 | |
| SLC5A8 | Solute carrier family 5 (iodide transporter), member 8 | 60 | |
| SLC6A2 | Solute carrier family 6 (neurotransmitter transporter, noradrenalin), member 2 | 61 | |
| SLC7A11 | Solute carrier family 7 (anionic amino acid transporter light chain, xc- system), member 11 | 85 | |
| SLC7A2 | Solute carrier family 7 (cationic amino acid transporter, y+ system), member 2 | 55 | |
| SLC9A6 | Solute carrier family 9 (sodium/hydrogen exchanger), member 6 | 55 | |
| SLITRK1 | SLIT and NTRK-like family, member 1 | 83 | |
| SLK | STE20-like kinase | 52 | |
| SMN1 | Survival of motor neuron 1, telomeric | 64 | |
| SMN2 | Survival of motor neuron 2, centromeric | 64 | |
| SNAPC3 | Small nuclear RNA activating complex, polypeptide 3, 50 kDa | 60 | |
| SNX5 | Sorting nexin 5 | 68 | |
| SOBP | Sine oculis binding protein homolog (Drosophila) | 55 | |
| SOCS4 | Suppressor of cytokine signaling 4 | 67 | |
| SORD | Sorbitol dehydrogenase | 57 | |
| SOS1 | Son of sevenless homolog 1 (Drosophila) | 62 | |
| SOX5 | SRY (sex determining region Y)-box 5 | 60 | |
| SOX6 | SRY (sex determining region Y)-box 6 | 78 | |
| SPIN1 | Spindlin 1 | 62 | |
| SPIRE1 | Spire homolog 1 (Drosophila) | 53 | |
| SPOCK1 | Sparc/Osteonectin, cwcv and kazal-like domains proteoglycan (testican) 1 | 80 | |
| SPP1 | Secreted phosphoprotein 1 | 88 | |
| SPRY4 | Sprouty homolog 4 (Drosophila) | 75 | |
| SPTLC1 | Serine palmitoyltransferase, long chain base subunit 1 | 62 | |

| | | | |
|-------------------|---|----|--|
| SRPK2 | SRSF protein kinase 2 | 84 | |
| SRSF7 | Serine/Arginine-rich splicing factor 7 | 84 | |
| SS18L1 | Synovial sarcoma translocation gene on chromosome 18-like 1 | 52 | |
| SS18L2 | Synovial sarcoma translocation gene on chromosome 18-like 2 | 54 | |
| SSB | Sjogren syndrome antigen B (autoantigen La) | 50 | |
| SSX2IP | Synovial sarcoma, X breakpoint 2 interacting protein | 65 | |
| ST6GALNAC3 | ST6 (α - <i>N</i> -acetyl-neuraminyl-2,3- β -galactosyl-1,3)- <i>N</i> -acetylgalactosaminide α -2,6-sialyltransferase 3 | 65 | |
| ST8SIA4 | ST8 α - <i>N</i> -acetyl-neuraminide α -2,8-sialyltransferase 4 | 82 | |
| STARD4 | StAR-related lipid transfer (START) domain containing 4 | 68 | |
| STC1 | Stanniocalcin 1 | 65 | |
| STC2 | Stanniocalcin 2 | 60 | |
| STEAP4 | STEAP family member 4 | 61 | |
| STRN | Striatin, calmodulin binding protein | 60 | |
| STS | Steroid sulfatase (microsomal), isozyme S | 55 | |
| STX7 | Syntaxin 7 | 73 | |
| STXBP5 | Syntaxin binding protein 5 (tomosyn) | 70 | |
| SUCLG2 | Succinate-CoA ligase, GDP-forming, β subunit | 81 | |
| SUDS3 | Suppressor of defective silencing 3 homolog (<i>S. cerevisiae</i>) | 56 | |
| SUGP2 | SURP and G patch domain containing 2 | 53 | |
| SULT1C2 | Sulfotransferase family, cytosolic, 1C, member 2 | 58 | |
| SVIP | Small VCP/p97-interacting protein | 70 | |
| SYNE1 | Spectrin repeat containing, nuclear envelope 1 | 88 | |
| SYNPO2 | Synaptopodin 2 | 66 | |
| SYNPR | Synaptoporin | 66 | |
| SYT15 | Synaptotagmin XV | 64 | |
| TADA1 | Transcriptional adaptor 1 | 59 | |
| TADA2B | Transcriptional adaptor 2B | 81 | |
| TAF1A | TATA box binding protein (TBP)-associated factor, RNA polymerase I, A, 48 kDa | 56 | |
| TAF5L | TAF5-like RNA polymerase II, p300/CBP-associated factor (PCAF)-associated factor, 65 kDa | 50 | |
| TAP2 | Transporter 2, ATP-binding cassette, sub-family B (MDR/TAP) | 57 | |
| TARDBP | TAR DNA binding protein | 62 | |

| | | | |
|-----------------|--|----|---|
| TBC1D1 | TBC1 (tre-2/USP6, BUB2, cdc16) domain family, member 1 | 89 | |
| TBC1D14 | TBC1 domain family, member 14 | 53 | |
| TBC1D24 | TBC1 domain family, member 24 | 66 | |
| TBC1D4 | TBC1 domain family, member 4 | 87 | |
| TBCD | Tubulin folding cofactor D | 57 | |
| TBCEL | Tubulin folding cofactor E-like | 56 | |
| TBL1X | Transducin (β)-like 1X-linked | 91 | |
| TBL1XR1 | Transducin (β)-like 1 X-linked receptor 1 | 88 | |
| TBPL1 | TBP-like 1 | 69 | |
| TBXA2R | Thromboxane A2 receptor | 60 | |
| TCERG1 | Transcription elongation regulator 1 | 94 | |
| TCF7L2 | Transcription factor 7-like 2 (T-cell specific, HMG-box) | 61 | v |
| TDRD6 | Tudor domain containing 6 | 58 | |
| TET2 | Tet methylcytosine dioxygenase 2 | 92 | v |
| TFEC | Transcription factor EC | 72 | |
| TFRC | Transferrin receptor (p90, CD71) | 84 | v |
| TGFBI | Transforming growth factor, beta-induced, 68 kDa | 65 | |
| TGFBRI | Transforming growth factor, beta receptor 1 | 73 | |
| TGFBRAP1 | Transforming growth factor, beta receptor associated protein 1 | 75 | |
| THAP2 | THAP domain containing, apoptosis associated protein 2 | 62 | |
| THOC7 | THO complex 7 homolog (Drosophila) | 65 | |
| TIA1 | TIA1 cytotoxic granule-associated RNA binding protein | 68 | |
| TIFA | TRAF-interacting protein with forkhead-associated domain | 89 | |
| TIMELESS | Timeless homolog (Drosophila) | 57 | |
| TIMM17A | Translocase of inner mitochondrial membrane 17 homolog A (yeast) | 57 | |
| TIMP3 | TIMP metalloproteinase inhibitor 3 | 71 | |
| TLL1 | Tolloid-like 1 | 73 | |
| TLR4 | Toll-like receptor 4 | 66 | |
| TM9SF3 | Transmembrane 9 superfamily member 3 | 91 | |
| TMEM106B | Transmembrane protein 106B | 78 | |
| TMEM131 | Transmembrane protein 131 | 86 | |
| TMEM135 | Transmembrane protein 135 | 63 | |
| TMEM14A | Transmembrane protein 14A | 53 | |

| | | | |
|--------------------|--|----|---|
| TMEM165 | Transmembrane protein 165 | 83 | |
| TMEM181 | Transmembrane protein 181 | 69 | |
| TMEM184C | Transmembrane protein 184C | 56 | |
| TMEM194A | Transmembrane protein 194A | 71 | |
| TMEM196 | Transmembrane protein 196 | 72 | |
| TMEM207 | Transmembrane protein 207 | 61 | |
| TMEM242 | Transmembrane protein 242 | 59 | |
| TMEM26 | Transmembrane protein 26 | 78 | |
| TMEM27 | Transmembrane protein 27 | 70 | |
| TMEM33 | Transmembrane protein 33 | 72 | |
| TMEM48 | Transmembrane protein 48 | 67 | |
| TMEM64 | Transmembrane protein 64 | 57 | |
| TMEM87B | Transmembrane protein 87B | 98 | |
| TMF1 | TATA element modulatory factor 1 | 80 | |
| TMPRSS11BNL | TMPRSS11B N terminal-like | 59 | |
| TMPRSS2 | Transmembrane protease, serine 2 | 70 | v |
| TNF | Tumor necrosis factor | 80 | |
| TNFAIP1 | Tumor necrosis factor, alpha-induced protein 1 (endothelial) | 61 | |
| TNFAIP6 | Tumor necrosis factor, α -induced protein 6 | 62 | |
| TNFRSF10B | Tumor necrosis factor receptor superfamily, member 10b | 57 | |
| TNFRSF11B | Tumor necrosis factor receptor superfamily, member 11b | 74 | |
| TNFSF4 | Tumor necrosis factor (ligand) superfamily, member 4 | 86 | |
| TNPO1 | Transportin 1 | 99 | |
| TNRC6B | Trinucleotide repeat containing 6B | 76 | |
| TNS3 | Tensin 3 | 51 | |
| TOM1L1 | Target of myb1 (chicken)-like 1 | 84 | |
| TOR1AIP2 | Torsin A interacting protein 2 | 86 | |
| TOX | Thymocyte selection-associated high mobility group box | 76 | |
| TP63 | Tumor protein p63 | 53 | |
| TPRX1 | Tetra-peptide repeat homeobox 1 | 82 | |
| TRAK1 | Trafficking protein, kinesin binding 1 | 76 | |
| TRDMT1 | tRNA aspartic acid methyltransferase 1 | 85 | |

| | | | |
|----------------|---|----|---|
| TRDN | Triadin | 60 | |
| TREML4 | Triggering receptor expressed on myeloid cells-like 4 | 72 | |
| TRIM2 | Tripartite motif containing 2 | 91 | |
| TRIM71 | Tripartite motif containing 71 | 58 | |
| TRNP1 | TMF1-regulated nuclear protein 1 | 50 | |
| TRPM3 | Transient receptor potential cation channel, subfamily M, member 3 | 57 | |
| TSC22D2 | TSC22 domain family, member 2 | 61 | |
| TSPAN8 | Tetraspanin 8 | 78 | |
| TSPYL4 | TSPY-like 4 | 71 | |
| TTC39B | Tetratricopeptide repeat domain 39B | 58 | |
| TWISTNB | TWIST neighbor | 54 | |
| TXNDC15 | Thioredoxin domain containing 15 | 89 | |
| UBE2A | Ubiquitin-conjugating enzyme E2A | 72 | |
| UBE2B | Ubiquitin-conjugating enzyme E2B | 69 | |
| UBE2D1 | Ubiquitin-conjugating enzyme E2D 1 | 80 | |
| UBL3 | Ubiquitin-like 3 | 63 | |
| UBP1 | Upstream binding protein 1 (LBP-1a) | 86 | |
| UNC80 | Unc-80 homolog (<i>C. elegans</i>) | 63 | |
| USO1 | USO1 vesicle docking protein homolog (yeast) | 53 | |
| USP31 | Ubiquitin specific peptidase 31 | 50 | |
| USP33 | Ubiquitin specific peptidase 33 | 77 | |
| USP42 | Ubiquitin specific peptidase 42 | 74 | |
| USP9Y | Ubiquitin specific peptidase 9, Y-linked | 57 | |
| VANGL1 | Vang-like 1 (van gogh, <i>Drosophila</i>) | 54 | |
| VBP1 | Von Hippel-Lindau binding protein 1 | 72 | |
| VCAN | Versican | 55 | |
| VCX | Variable charge, X-linked | 59 | |
| VCX3A | Variable charge, X-linked 3A | 59 | |
| VCX3B | Variable charge, X-linked 3B | 61 | |
| VCY1B | Variable charge, Y-linked 1B | 73 | |
| VHL | Von Hippel-Lindau tumor suppressor | 64 | v |
| VIP | Vasoactive intestinal peptide | 58 | |
| VPS13A | Vacuolar protein sorting 13 homolog A (<i>S. cerevisiae</i>)+B986 | 57 | |

| | | | |
|----------------|---|----|---|
| VPS13C | Vacuolar protein sorting 13 homolog C (<i>S. cerevisiae</i>) | 52 | |
| VTI1A | Vesicle transport through interaction with t-SNAREs homolog 1A (yeast) | 50 | v |
| WASL | Wiskott-Aldrich syndrome-like | 51 | |
| WDFY3 | WD repeat and FYVE domain containing 3 | 65 | |
| WDR36 | WD repeat domain 36 | 54 | |
| WDYHV1 | WDYHV motif containing 1 | 50 | |
| WHAMM | WAS protein homolog associated with actin, golgi membranes and microtubules | 63 | |
| WHSC2 | Wolf-Hirschhorn syndrome candidate 2 | 79 | |
| WIF1 | WNT inhibitory factor 1 | 51 | v |
| WNK1 | WNK lysine deficient protein kinase 1 | 65 | |
| WNT16 | Wingless-type MMTV integration site family, member 16 | 55 | |
| WSCD1 | WSC domain containing 1 | 58 | |
| XPO7 | Exportin 7 | 61 | |
| XRN1 | 5'-3' exoribonuclease 1 | 76 | |
| XRRA1 | X-ray radiation resistance associated 1 | 57 | |
| YLPM1 | YLP motif containing 1 | 69 | |
| YPEL1 | Yippee-like 1 (<i>Drosophila</i>) | 66 | |
| YTHDC1 | YTH domain containing 1 | 70 | |
| YTHDC2 | YTH domain containing 2 | 58 | |
| YWHAG | Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma polypeptide | 53 | |
| ZAK | Sterile alpha motif and leucine zipper containing kinase AZK | 64 | |
| ZBTB34 | Zinc finger and BTB domain containing 34 | 64 | |
| ZBTB4 | Zinc finger and BTB domain containing 4 | 76 | |
| ZBTB43 | Zinc finger and BTB domain containing 43 | 80 | |
| ZBTB44 | Zinc finger and BTB domain containing 44 | 78 | |
| ZC3H6 | Zinc finger CCCH-type containing 6 | 75 | |
| ZDHHC21 | Zinc finger, DHHC-type containing 21 | 76 | |
| ZDHHC3 | Zinc finger, DHHC-type containing 3 | 51 | |
| ZEB2 | Zinc finger E-box binding homeobox 2 | 68 | |
| ZFAND4 | Zinc finger, AN1-type domain 4 | 63 | |
| ZFAND6 | Zinc finger, AN1-type domain 6 | 82 | |
| ZFP14 | Zinc finger protein 14 homolog (mouse) | 93 | |

| | | | |
|----------------|---|-----|--|
| ZFP28 | Zinc finger protein 28 homolog (mouse) | 52 | |
| ZFP36L1 | Zinc finger protein 36, C3H type-like 1 | 70 | |
| ZFP36L2 | Zinc finger protein 36, C3H type-like 2 | 85 | |
| ZFP62 | Zinc finger protein 62 homolog (mouse) | 56 | |
| ZFP82 | Zinc finger protein 82 homolog (mouse) | 51 | |
| ZFP91 | Zinc finger protein 91 homolog (mouse) | 62 | |
| ZFYVE16 | Zinc finger, FYVE domain containing 16 | 63 | |
| ZFYVE26 | Zinc finger, FYVE domain containing 26 | 50 | |
| ZIC2 | Zic family member 2 | 55 | |
| ZIC3 | Zic family member 3 | 80 | |
| ZMYND11 | Zinc finger, MYND-type containing 11 | 70 | |
| ZNF124 | Zinc finger protein 124 | 77 | |
| ZNF136 | Zinc finger protein 136 | 63 | |
| ZNF14 | Zinc finger protein 14 | 64 | |
| ZNF140 | Zinc finger protein 140 | 55 | |
| ZNF181 | Zinc finger protein 181 | 79 | |
| ZNF20 | Zinc finger protein 20 | 56 | |
| ZNF217 | Zinc finger protein 217 | 57 | |
| ZNF266 | Zinc finger protein 266 | 72 | |
| ZNF268 | Zinc finger protein 268 | 97 | |
| ZNF277 | Zinc finger protein 277 | 57 | |
| ZNF28 | Zinc finger protein 28 | 63 | |
| ZNF280D | Zinc finger protein 280D | 73 | |
| ZNF326 | Zinc finger protein 326 | 61 | |
| ZNF329 | Zinc finger protein 329 | 77 | |
| ZNF37A | Zinc finger protein 37A | 62 | |
| ZNF382 | Zinc finger protein 382 | 54 | |
| ZNF396 | Zinc finger protein 396 | 78 | |
| ZNF439 | Zinc finger protein 439 | 100 | |
| ZNF44 | Zinc finger protein 44 | 52 | |
| ZNF440 | Zinc finger protein 440 | 95 | |
| ZNF441 | Zinc finger protein 441 | 78 | |
| ZNF454 | Zinc finger protein 454 | 78 | |

| | | | |
|----------------|-------------------------------|-----|--|
| ZNF468 | Zinc finger protein 468 | 87 | |
| ZNF479 | Zinc finger protein 479 | 71 | |
| ZNF514 | Zinc finger protein 514 | 86 | |
| ZNF527 | Zinc finger protein 527 | 51 | |
| ZNF544 | Znc finger protein 544 | 69 | |
| ZNF555 | Zinc finger protein 555 | 55 | |
| ZNF559 | Zinc finger protein 559 | 98 | |
| ZNF562 | Zinc finger protein 562 | 69 | |
| ZNF563 | Zinc finger protein 563 | 88 | |
| ZNF568 | Zinc finger protein 568 | 64 | |
| ZNF586 | Zinc finger protein 586 | 84 | |
| ZNF592 | Zinc finger protein 592 | 53 | |
| ZNF594 | Zinc finger protein 594 | 100 | |
| ZNF606 | Zinc finger protein 606 | 60 | |
| ZNF615 | Zinc finger protein 615 | 51 | |
| ZNF626 | Zinc finger protein 626 | 51 | |
| ZNF654 | Zinc finger protein 654 | 67 | |
| ZNF655 | Zinc finger protein 655 | 80 | |
| ZNF673 | Zinc finger family member 673 | 80 | |
| ZNF674 | Zinc finger protein 674 | 60 | |
| ZNF677 | Zinc finger protein 677 | 67 | |
| ZNF700 | Zinc finger protein 700 | 75 | |
| ZNF704 | Zinc finger protein 704 | 92 | |
| ZNF74 | Zinc finger protein 74 | 55 | |
| ZNF780A | Zinc finger protein 780A | 80 | |
| ZNF780B | Zinc finger protein 780B | 97 | |
| ZNF781 | Zinc finger protein 781 | 99 | |
| ZNF800 | Zinc finger protein 800 | 59 | |
| ZNF814 | Zinc finger protein 814 | 87 | |
| ZNF823 | Zinc finger protein 823 | 69 | |
| ZNF83 | Zinc finger protein 83 | 80 | |
| ZNF844 | Zinc finger protein 844 | 98 | |
| ZNF850 | Zinc finger protein 850 | 66 | |

| | | | |
|----------------|--|----|--|
| ZNRF2 | Zinc and ring finger 2 | 54 | |
| ZRANB1 | Zinc finger, RAN-binding domain containing 1 | 55 | |
| ZSCAN23 | Zinc finger and SCAN domain containing 23 | 88 | |
| ZXDC | ZXD family zinc finger C | 92 | |

Supplementary Table 4. Predicted targets of hsa-miR-181a-5p by miRanda microT v5.0 that are cancer genes.

| Gene symbol | Full nmae |
|--------------------|--|
| ABI1 | Abl-interactor 1 |
| ABL1 | ABL proto-oncogene 1, non-receptor tyrosine kinase |
| ABL2 | ABL proto-oncogene 2, non-receptor tyrosine kinase |
| AKAP9 | A kinase (PRKA) anchor protein 9 |
| AKT2 | V-akt murine thymoma viral oncogene homolog 2 |
| APC | Adenomatous polyposis coli |
| ARHGEF12 | Rho guanine nucleotide exchange factor (GEF) 12 |
| ARID2 | AT rich interactive domain 2 |
| ARNT | Aryl hydrocarbon receptor nuclear translocator |
| ATF1 | Activating transcription factor 1 |
| ATM | ATM serine/threonine kinase |
| ATP2B3 | ATPase, Ca ⁺⁺ transporting, plasma membrane 3 |
| ATRX | α -Thalassemia/mental retardation syndrome X-linked |
| BAP1 | BRCA1 associated protein-1 (ubiquitin carboxy-terminal hydrolase) |
| BCL2 | B-cell CLL/lymphoma 2 |
| BCL6 | B-cell CLL/lymphoma 6 |
| BCL7A | B-cell CLL/lymphoma 7A |
| BCL9 | B-cell CLL/lymphoma 9 |
| BCOR | BCL6 corepressor |
| BCR | Breakpoint cluster region |
| BRCA1 | Breast cancer 1, early onset |
| BTG1 | B-cell translocation gene 1, anti-proliferative |
| C16orf75 | RMI2, RecQ mediated genome instability 2, homolog (<i>S. cerevisiae</i>) |
| CALR | Calreticulin |
| CAMTA1 | Calmodulin binding transcription activator 1 |
| CANT1 | Calcium activated nucleotidase 1 |
| CARD11 | Caspase recruitment domain family, member 11 |
| CASP8 | Caspase 8, apoptosis-related cysteine peptidase |
| CBFA2T3 | Core-binding factor, runt domain, alpha subunit 2; translocated to, 3 |
| CBL | Cbl proto-oncogene, E3 ubiquitin protein ligase |

| | |
|---------|--|
| CBLB | Cbl proto-oncogene B, E3 ubiquitin protein ligase |
| CCDC6 | Coiled-coil domain containing 6 |
| CCNE1 | Cyclin E1 |
| CD274 | CD274 molecule |
| CDC73 | Cell division cycle 73 |
| CDH1 | Cadherin 1, type 1, E-cadherin (epithelial) |
| CDK6 | Cyclin-dependent kinase 6 |
| CDX2 | Caudal type homeobox 2 |
| CEBPA | CCAAT/enhancer binding protein (C/EBP), α |
| CHCHD7 | Coiled-coil-helix-coiled-coil-helix domain containing 7 |
| CHN1 | Chimerin 1 |
| CLTC | Clathrin, heavy chain (Hc) |
| CREB1 | cAMP responsive element binding protein 1 |
| CREB3L2 | cAMP responsive element binding protein 3-like 2 |
| CREBBP | CREB binding protein |
| CRTC3 | CREB regulated transcription coactivator 3 |
| CTNNB1 | Catenin (cadherin-associated protein), β 1, 88 kDa |
| CYLD | Cylindromatosis (turban tumor syndrome) |
| DAXX | Death-domain associated protein |
| DDX10 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 10 |
| DDX5 | DEAD (Asp-Glu-Ala-Asp) box helicase 5 |
| DEK | DEK proto-oncogene |
| DICER1 | Dicer 1, ribonuclease type III |
| DNM2 | Dynamin 2 |
| ECT2L | Epithelial cell transforming 2 like |
| EGFR | Epidermal growth factor receptor |
| EIF4A2 | Eukaryotic translation initiation factor 4A2 |
| EML4 | Echinoderm microtubule associated protein like 4 |
| EPS15 | Epidermal growth factor receptor pathway substrate 15 |
| ERG | V-ets avian erythroblastosis virus E26 oncogene homolog |
| ETV1 | Ets variant 1 |
| ETV6 | Ets variant 6 |
| EXT2 | Exostosin glycosyltransferase 2 |

| | |
|-----------|--|
| EZH2 | Enhancer of zeste 2 polycomb repressive complex 2 subunit |
| FAM46C | Family with sequence similarity 46, member C |
| FANCA | Fanconi anemia, complementation group A |
| FANCD2 | Fanconi anemia, complementation group D2 |
| FANCF | Fanconi anemia, complementation group F |
| FANCG | Fanconi anemia, complementation group G |
| FAS | Fas cell surface death receptor |
| FBXO11 | F-box protein 11 |
| FGFR1 | Fibroblast growth factor receptor 1 |
| FGFR1OP | FGFR1 oncogene partner |
| FGFR2 | Fibroblast growth factor receptor 2 |
| FGFR3 | Fibroblast growth factor receptor 3 |
| FLT3 | Fms-related tyrosine kinase 3 |
| FNBP1 | Formin binding protein 1 |
| FOXP1 | Forkhead box P1 |
| STL3 | Follistatin-like 3 (secreted glycoprotein) |
| FUS | FUS RNA binding protein |
| GAS7 | Growth arrest-specific 7 |
| GATA2 | GATA binding protein 2 |
| GNAS | GNAS complex locus |
| GOPC | Golgi-associated PDZ and coiled-coil motif containing |
| H3F3B | H3 histone, family 3B (H3.3B) |
| HERPUD1 | Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1 |
| HEY1 | Hes-related family bHLH transcription factor with YRPW motif 1 |
| HLF | Hepatic leukemia factor |
| HMGA2 | High mobility group AT-hook 2 |
| HNRNPA2B1 | Heterogeneous nuclear ribonucleoprotein A2/B1 |
| HOOK3 | Hook microtubule-tethering protein 3 |
| HOXA11 | Homeobox A11 |
| HOXC11 | Homeobox C11 |
| HOXC13 | Homeobox C13 |

| | |
|----------|---|
| IDH1 | Isocitrate dehydrogenase 1 (NADP ⁺), soluble |
| IGL@ | Immunoglobulin lambda locus |
| IL2 | Interleukin 2 |
| IL21R | Interleukin 21 receptor |
| IL6ST | Interleukin 6 signal transducer |
| IL7R | Interleukin 7 receptor |
| IRF4 | Interferon regulatory factor 4 |
| JAK2 | Janus kinase 2 |
| JAZF1 | JAZF zinc finger 1 |
| JUN | Jun proto-oncogene |
| KCNJ5 | Potassium inwardly-rectifying channel, subfamily J, member 5 |
| KDM5A | Lysine (K)-specific demethylase 5A |
| KDM5C | Lysine (K)-specific demethylase 5C |
| KDM6A | Lysine (K)-specific demethylase 6A |
| KDR | Kinase insert domain receptor (a type III receptor tyrosine kinase) |
| KIAA1549 | KIAA1549 |
| KLK2 | Kallikrein-related peptidase 2 |
| KRAS | Kirsten rat sarcoma viral oncogene homolog |
| LASP1 | LIM and SH3 protein 1 |
| LCP1 | Lymphocyte cytosolic protein 1 (L-plastin) |
| LIFR | Leukemia inhibitory factor receptor α |
| LMO1 | LIM domain only 1 (rhombotin 1) |
| LPP | LIM domain containing preferred translocation partner in lipoma |
| MAF | V-maf avian musculoaponeurotic fibrosarcoma oncogene homolog |
| MAFB | V-maf avian musculoaponeurotic fibrosarcoma oncogene homolog B |
| MALAT1 | Metastasis associated lung adenocarcinoma transcript 1 (non-protein coding) |
| MALT1 | Mucosa associated lymphoid tissue lymphoma translocation gene 1 |
| MAP2K1 | Mitogen-activated protein kinase kinase 1 |
| MAP2K4 | Mitogen-activated protein kinase kinase 4 |
| MDM2 | MDM2 proto-oncogene, E3 ubiquitin protein ligase |
| MDM4 | MDM4, p53 regulator |
| MDS2 | Myelodysplastic syndrome 2 translocation associated |

| | |
|----------|---|
| MET | MET proto-oncogene, receptor tyrosine kinase |
| MITF | Microphthalmia-associated transcription factor |
| MKL1 | Megakaryoblastic leukemia (translocation) 1 |
| MLF1 | Myeloid leukemia factor 1 |
| MLH1 | MutL homolog 1 |
| MLL | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila) |
| MLL3 | Myeloid/lymphoid or mixed-lineage leukemia 3 |
| MLLT10 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 10 |
| MLLT3 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 3 |
| MLLT4 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 4 |
| MLLT6 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 6 |
| MN1 | Meningioma (disrupted in balanced translocation) 1 |
| MPL | MPL proto-oncogene, thrombopoietin receptor |
| MSH2 | MutS homolog 2 |
| MSI2 | Musashi RNA-binding protein 2 |
| MYB | V-myb avian myeloblastosis viral oncogene homolog |
| MYCN | V-myc avian myelocytomatosis viral oncogene neuroblastoma derived homolog |
| MYH11 | Myosin, heavy chain 11, smooth muscle |
| NCOA1 | Nuclear receptor coactivator 1 |
| NCOA2 | Nuclear receptor coactivator 2 |
| NF1 | Neurofibromin 1 |
| NF2 | Neurofibromin 2 (merlin) |
| NFE2L2 | Nuclear factor, erythroid 2-like 2 |
| NFIB | Nuclear factor I/B |
| NIN | Ninein (GSK3B interacting protein) |
| NOTCH2 | Notch 2 |
| NPM1 | Nucleophosmin (nucleolar phosphoprotein B23, numatrin) |
| NR4A3 | Nuclear receptor subfamily 4, group A, member 3 |
| NRAS | Neuroblastoma RAS viral (v-ras) oncogene homolog |
| NSD1 | Nuclear receptor binding SET domain protein 1 |
| NT5C2 | 5'-Nucleotidase, cytosolic II |
| NUP98 | Nucleoporin 98 kDa |
| PAFAH1B2 | Platelet-activating factor acetylhydrolase 1b, catalytic subunit 2 (30 kDa) |

| | |
|----------|---|
| PAX3 | Paired box 3 |
| PAX5 | Paired box 5 |
| PAX7 | Paired box 7 |
| PBRM1 | Polybromo 1 |
| PBX1 | Pre-B-cell leukemia homeobox 1 |
| PDE4DIP | Phosphodiesterase 4D interacting protein |
| PDGFRA | Platelet-derived growth factor receptor, α polypeptide |
| PDGFRB | Platelet-derived growth factor receptor, β polypeptide |
| PHF6 | PHD finger protein 6 |
| PHOX2B | Paired-like homeobox 2b |
| PICALM | Phosphatidylinositol binding clathrin assembly protein |
| PIK3R1 | Phosphoinositide-3-kinase, regulatory subunit 1 (α) |
| PLAG1 | Pleiomorphic adenoma gene 1 |
| PML | Promyelocytic leukemia |
| PMS1 | PMS1 postmeiotic segregation increased 1 (<i>S. cerevisiae</i>) |
| PPARG | Peroxisome proliferator-activated receptor gamma |
| PRDM1 | PR domain containing 1, with ZNF domain |
| PTEN | Phosphatase and tensin homolog |
| PTPRC | Protein tyrosine phosphatase, receptor type, C |
| RAC1 | Ras-related C3 botulinum toxin substrate 1 (rho family, small GTP binding protein Rac1) |
| RAD21 | RAD21 homolog (<i>S. pombe</i>) |
| RALGDS | Ral guanine nucleotide dissociation stimulator |
| RANBP17 | RAN binding protein 17 |
| RAP1GDS1 | RAP1, GTP-GDP dissociation stimulator 1 |
| RB1 | Retinoblastoma 1 |
| RNF43 | Ring finger protein 43 |
| RPL5 | Ribosomal protein L5 |
| RUNX1 | Runt-related transcription factor 1 |
| SDC4 | Syndecan 4 |
| SETBP1 | SET binding protein 1 |
| SF3B1 | Splicing factor 3b, subunit 1, 155 kDa |
| SH2B3 | SH2B adaptor protein 3 |
| SLC34A2 | Solute carrier family 34 (type II sodium/phosphate cotransporter), member 2 |

| | |
|---------|---|
| SMARCA4 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 4 |
| SMARCE1 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily e, member 1 |
| SRGAP3 | SLIT-ROBO Rho GTPase activating protein 3 |
| SS18L1 | Synovial sarcoma translocation gene on chromosome 18-like 1 |
| STAT3 | Signal transducer and activator of transcription 3 (acute-phase response factor) |
| SUFU | Suppressor of fused homolog (Drosophila) |
| SUZ12 | SUZ12 polycomb repressive complex 2 subunit |
| SYK | Spleen tyrosine kinase |
| TAF15 | TAF15 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 68 kDa |
| TAL2 | T-cell acute lymphocytic leukemia 2 |
| TBL1XR1 | Transducin β -like 1 X-linked receptor 1 |
| TCF7L2 | Transcription factor 7-like 2 (T-cell specific, HMG-box) |
| TCL6 | T-cell leukemia/lymphoma 6 (non-protein coding) |
| TET2 | Tet methylcytosine dioxygenase 2 |
| TFRC | Transferrin receptor |
| TMPRSS2 | Transmembrane protease, serine 2 |
| TOP1 | Topoisomerase (DNA) I |
| TPM3 | Tropomyosin 3 |
| TRA@ | T cell receptor, α |
| TRIM27 | Tripartite motif containing 27 |
| TRIM33 | Tripartite motif containing 33 |
| TRRAP | Transformation/transcription domain-associated protein |
| TSC1 | Tuberous sclerosis 1 |
| TSHR | Thyroid stimulating hormone receptor |
| U2AF1 | U2 small nuclear RNA auxiliary factor 1 |
| UBR5 | Ubiquitin protein ligase E3 component n-recognin 5 |
| VTI1A | Vesicle transport through interaction with t-SNAREs 1A |
| WHSC1 | Wolf-Hirschhorn syndrome candidate 1 |
| WIF1 | WNT inhibitory factor 1 |
| YWHAE | Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, epsilon |
| ZNF521 | Zinc finger protein 521 |

Supplementary Table 6. Predicted targets of hsa-miR-181a-5p by RNA22 v2

| Gene symbol | Gene name | Cancer gene |
|--------------------|---|--------------------|
| A2ML1 | α 2-Macroglobulin-like 1 | |
| AADACL3 | Arylacetamide deacetylase-like 3 | |
| AADAT | Aminoadipate aminotransferase | |
| AAGAB | α - and γ -Adaptin binding protein | |
| AAK1 | AP2 associated kinase 1 | |
| AAMP | Angio-associated, migratory cell protein | |
| AARS | Alanyl-trna synthetase | |
| AARS2 | Alanyl-trna synthetase 2, mitochondrial (putative) | |
| AARSD1 | Alanyl-trna synthetase domain containing 1 | |
| AASDHPPT | Aminoadipate-semialdehyde dehydrogenase-phosphopantetheinyl transferase | |
| AASS | Aminoadipate-semialdehyde synthase | |
| ABCA1 | ATP-binding cassette, sub-family A (ABC1), member 1 | |
| ABCA10 | ATP-binding cassette, sub-family A (ABC1), member 10 | |
| ABCA12 | ATP-binding cassette, sub-family A (ABC1), member 12 | |
| ABCA13 | ATP-binding cassette, sub-family A (ABC1), member 13 | |
| ABCA2 | ATP-binding cassette, sub-family A (ABC1), member 2 | |
| ABCA3 | ATP-binding cassette, sub-family A (ABC1), member 3 | |
| ABCA4 | ATP-binding cassette, sub-family A (ABC1), member 4 | |
| ABCA5 | ATP-binding cassette, sub-family A (ABC1), member 5 | |
| ABCA6 | ATP-binding cassette, sub-family A (ABC1), member 6 | |
| ABCA7 | ATP-binding cassette, sub-family A (ABC1), member 7 | |
| ABCA8 | ATP-binding cassette, sub-family A (ABC1), member 8 | |
| ABCA9 | ATP-binding cassette, sub-family A (ABC1), member 9 | |
| ABCB1 | ATP-binding cassette, sub-family B (MDR/TAP), member 1 | |
| ABCB11 | ATP-binding cassette, sub-family B (MDR/TAP), member 11 | |
| ABCB9 | ATP-binding cassette, sub-family B (MDR/TAP), member 9 | |
| ABCC1 | ATP-binding cassette, sub-family C (CFTR/MRP), member 1 | |
| ABCC10 | ATP-binding cassette, sub-family C (CFTR/MRP), member 10 | |
| ABCC11 | ATP-binding cassette, sub-family C (CFTR/MRP), member 11 | |

| | | |
|-----------------------|--|--|
| ABCC12 | ATP-binding cassette, sub-family C (CFTR/MRP), member 12 | |
| ABCC3 | ATP-binding cassette, sub-family C (CFTR/MRP), member 3 | |
| ABCC4 | ATP-binding cassette, sub-family C (CFTR/MRP), member 4 | |
| ABCC5 | ATP-binding cassette, sub-family C (CFTR/MRP), member 5 | |
| ABCC6 | ATP-binding cassette, sub-family C (CFTR/MRP), member 6 | |
| ABCC8 | ATP-binding cassette, sub-family C (CFTR/MRP), member 8 | |
| ABCC9 | ATP-binding cassette, sub-family C (CFTR/MRP), member 9 | |
| ABCG4 | ATP-binding cassette, sub-family G (WHITE), member 4 | |
| ABCG5 | ATP-binding cassette, sub-family G (WHITE), member 5 | |
| ABHD10 | Abhydrolase domain containing 10 | |
| ABHD16A | Abhydrolase domain containing 16A | |
| ABHD3 | Abhydrolase domain containing 3 | |
| ABHD4 | Abhydrolase domain containing 4 | |
| ABI2 | Abl-interactor 2 | |
| ABL2 | V-abl Abelson murine leukemia viral oncogene homolog 2 | |
| ABLIM3 | Actin binding LIM protein family, member 3 | |
| ABR | Active BCR-related gene | |
| ABT1 | Activator of basal transcription 1 | |
| AC000120.1 | cDNA FLJ56789 | |
| AC002094.1 | Vitronectin vitronectin V65 subunit vitronectin V10 subunitsomatomedin-B | |
| AC002511.1 | Cdna FLJ46220 fis, clone TESTI4013774 | |
| AC003682.1 | Zinc finger protein 550 | |
| AC004223.1 | Cdna FLJ52625 | |
| AC005324.8-001 | Zinc finger protein 286A | |
| AC005522.1 | Protein deltex-2 | |
| AC005726.6 | Uncharacterized serine/threonine-protein kinase sgk494 | |
| AC006008.1 | CDNA FLJ26529 fis, clone KDN08784 | |
| AC006305.1 | HCG2045177cDNA FLJ45743 fis, clone KIDNE2016464 | |
| AC006372.1 | | |
| AC006449.1 | Cdna FLJ52623 | |
| AC007000.1 | Coiled-coil domain-containing protein 146 | |
| AC007390.5 | HCG1988162Uncharacterized protein | |

| | | |
|-------------------|--|--|
| AC007608.1 | | |
| AC008073.5 | Pre-mrna branch site protein p14 | |
| AC008393.1 | cDNA FLJ53540 | |
| AC008403.1 | | |
| AC008522.1 | HCG2016541Putative uncharacterized protein dkfzp434p228 | |
| AC009053.1 | cDNA FLJ39449 fis, clone PROST2008360, highly similar to Homo sapiens pyruvate dehydrogenase phosphatase regulatory subunit (PDPR), mRNA | |
| AC009113.2 | cDNA FLJ27068 fis, clone SPL01475 | |
| AC009123.1 | cDNA FLJ38012 fis, clone CTONG2012554 | |
| AC009955.1 | Serine/threonine-protein kinase 11-interacting protein | |
| AC009996.1 | | |
| AC010198.1 | Cdna FLJ75546 | |
| AC010328.1 | Envelope glycoprotein ENVV1 | |
| AC010441.1 | Putative small membrane protein NID67 | |
| AC010536.1 | HCG1980662 | |
| AC010724.2 | Golgin subfamily A member 6-like protein 9 | |
| AC010724.3 | Chondroitin sulfate proteoglycan 4 pseudogene (LOC440297), non-coding RNA | |
| AC010973.1 | Autophagy-related protein 9B | |
| AC011295.1 | Chondroitin sulfate proteoglycan 4 pseudogene (LOC440297), non-coding RNA | |
| AC011357.1 | Serine/threonine-protein phosphatase 2A 55 kda regulatory subunit B beta isoform | |
| AC011443.1 | Iron/zinc purple acid phosphatase-like protein | |
| AC011676.1 | HCG2009400SLC45A4 protein | |
| AC012313.1 | Hepatocellular carcinoma-associated antigen HCA25a | |
| AC012621.2 | Centrosomal protein CP110 | |
| AC012652.1 | Calcium-binding protein p22 | |
| AC013461.1 | Mitogen-activated protein kinase kinase kinase MLT | |
| AC013480.1 | cDNA FLJ42903 fis, clone BRHIP3013765 | |
| AC016889.1 | cDNA FLJ50764 | |
| AC020907.1 | Uncharacterized protein | |
| AC021860.1 | | |

| | | |
|-------------------|--|--|
| AC022148.1 | | |
| AC024909.1 | Cdna FLJ42271 fis, clone TKIDN2015788 | |
| AC025287.3 | cDNA FLJ58921 | |
| AC026495.1 | cDNA FLJ60245, highly similar to HECT domain and RCC1-like domain-containing protein 2 | |
| AC027125.1 | ELL-associated factor 1 | |
| AC027323.1 | Lysm and putative peptidoglycan-binding domain-containing protein 3 | |
| AC044799.1 | cDNA FLJ56854 | |
| AC044860.3 | Golgin subfamily A member 2-like protein 2 | |
| AC051642.1 | | |
| AC051642.2 | HCG1786243PRO1496 | |
| AC067745.1 | Maxi-K channel HSLO | |
| AC067815.1 | cDNA FLJ23789 fis, clone HEP21465 | |
| AC068775.1 | Uncharacterized protein | |
| AC073610.1 | cDNA, FLJ78869 | |
| AC074389.6 | | |
| AC078953.1 | | |
| AC079612.1 | cDNA FLJ45964 fis, clone PLACE7014396 | |
| AC087289.1 | cDNA FLJ40144 fis, clone TESTI2013012 | |
| AC091565.1 | | |
| AC092117.1 | cDNA FLJ43818 fis, clone TESTI4001923 | |
| AC092118.1 | | |
| AC092135.1 | C-Maf-inducing protein | |
| AC092329.1 | HCG2000535cDNA FLJ32177 fis, clone PLACE6001294 | |
| AC092384.1 | Cdna FLJ26728 fis, clone PNC06635 | |
| AC092723.1 | HCG1980276MUSP1 | |
| AC093726.6 | HCG1999107Uncharacterized protein | |
| AC099759.1 | STEAP family protein MGC87042 | |
| AC103588.1 | HCG1813935Uncharacterized protein | |
| AC104304.1 | Putative teratocarcinoma-derived growth factor 2 | |
| AC104523.1 | cDNA FLJ46230 fis, clone TESTI4014977 | |
| AC104650.1 | SH3 domain and tetratricopeptide repeats-containing protein 1 | |
| AC106772.1 | CDNA FLJ20413 fis, clone KAT02170HCG1742967 | |

| | | |
|-------------------|---|--|
| AC107373.2 | cDNA FLJ53524 | |
| AC107992.1 | cDNA FLJ46325 fis, clone TESTI4043371 | |
| AC108134.1 | | |
| AC110491.1 | cDNA FLJ60082, weakly similar to Uro-adherence factor A | |
| AC111170.2 | cDNA FLJ40589 fis, clone THYMU2009596 | |
| AC111177.1 | HCG2044188Seven transmembrane helix receptor | |
| AC114772.1 | Uncharacterized protein FLJ45252 | |
| AC114947.1 | Serine/threonine-protein kinase NIM1 | |
| AC116655.1 | | |
| AC120045.3 | cDNA FLJ52611 | |
| AC129778.2 | cDNA FLJ44869 fis, clone BRAMY2015516 | |
| AC130352.1 | cDNA FLJ26472 fis, clone KDN04506 | |
| AC131180.1 | Uncharacterized protein c2orf14 | |
| AC132186.2 | CDNA FLJ27243 fis, clone SYN08134 | |
| AC135995.1 | Chondroitin sulfate proteoglycan 4 pseudogene (LOC440297), non-coding RNA | |
| AC139426.2 | Cdna FLJ52611 [Source:uniprotkb/trembl;Acc:B4DXX6] | |
| AC140481.1 | | |
| AC145123.1 | Jerky protein homolog isoform b | |
| AC145625.1 | | |
| AC217773.1 | | |
| ACACA | Acetyl-coa carboxylase alpha | |
| ACAD8 | Acyl-coa dehydrogenase family, member 8 | |
| ACAD9 | Acyl-coa dehydrogenase family, member 9 | |
| ACADS | Acyl-coa dehydrogenase, C-2 to C-3 short chain | |
| ACADSB | Acyl-coa dehydrogenase, short/branched chain | |
| ACAN | Aggrecan | |
| ACAP1 | Arfgap with coiled-coil, ankyrin repeat and PH domains 1 | |
| ACAP2 | Arfgap with coiled-coil, ankyrin repeat and PH domains 2 | |
| ACAT1 | Acetyl-coa acetyltransferase 1 | |
| ACBD5 | Acyl-coa binding domain containing 5 | |
| ACCN1 | Amiloride-sensitive cation channel 1, neuronal | |
| ACCN3 | Amiloride-sensitive cation channel 3 | |

| | | |
|-------------------|---|--|
| ACER3 | Alkaline ceramidase 3 | |
| ACLY | ATP citrate lyase | |
| ACO1 | Aconitase 1, soluble | |
| ACOT11 | Acyl-coa thioesterase 11 | |
| ACOX1 | Acyl-coa oxidase 1, palmitoyl | |
| ACP2 | Acid phosphatase 2, lysosomal | |
| ACP6 | Acid phosphatase 6, lysophosphatidic | |
| ACRC | Acidic repeat containing | |
| ACRV1 | Acrosomal vesicle protein 1 | |
| ACSBG1 | Acyl-CoA synthetase bubblegum family member 1 | |
| ACSF3 | Acyl-CoA synthetase family member 3 | |
| ACSL1 | Acyl-CoA synthetase long-chain family member 1 | |
| ACSL6 | Acyl-CoA synthetase long-chain family member 6 | |
| ACSM3 | Acyl-CoA synthetase medium-chain family member 3 | |
| ACSM5 | Acyl-CoA synthetase medium-chain family member 5 | |
| ACSS1 | Acyl-CoA synthetase short-chain family member 1 | |
| ACSS2 | Acyl-CoA synthetase short-chain family member 2 | |
| ACTG1 | Actin, gamma 1 | |
| ACTL6A | Actin-like 6A | |
| ACTN2 | Actinin, alpha 2 | |
| ACTN4 | Actinin, alpha 4 | |
| ACTR3 | ARP3 actin-related protein 3 homolog (yeast) | |
| ACTR3B | ARP3 actin-related protein 3 homolog B (yeast) | |
| ACTR6 | ARP6 actin-related protein 6 homolog (yeast) | |
| ACTRT2 | Actin-related protein T2 | |
| ACVR1 | Activin A receptor, type I | |
| ACVR1B | Activin A receptor, type IB | |
| ACVR2A | Activin A receptor, type IIA | |
| AD000671.1 | Histone-lysine N-methyltransferase MLL4 | |
| AD000685.1 | Leukotriene-B(4) omega-hydroxylase 2 | |
| AD001527.1 | Putative transcription factor Ovo-like 2-like | |
| ADAD1 | Adenosine deaminase domain containing 1 (testis-specific) | |
| ADAL | Adenosine deaminase-like | |

| | | |
|-----------------|---|--|
| ADAM10 | ADAM metallopeptidase domain 10 | |
| ADAM12 | ADAM metallopeptidase domain 12 | |
| ADAM15 | ADAM metallopeptidase domain 15 | |
| ADAM22 | ADAM metallopeptidase domain 22 | |
| ADAM29 | ADAM metallopeptidase domain 29 | |
| ADAM30 | ADAM metallopeptidase domain 30 | |
| ADAM32 | ADAM metallopeptidase domain 32 | |
| ADAM33 | ADAM metallopeptidase domain 33 | |
| ADAM7 | ADAM metallopeptidase domain 7 | |
| ADAM9 | ADAM metallopeptidase domain 9 | |
| ADAMTS1 | ADAM metallopeptidase with thrombospondin type 1 motif, 1 | |
| ADAMTS10 | ADAM metallopeptidase with thrombospondin type 1 motif, 10 | |
| ADAMTS12 | ADAM metallopeptidase with thrombospondin type 1 motif, 12 | |
| ADAMTS16 | ADAM metallopeptidase with thrombospondin type 1 motif, 16 | |
| ADAMTS17 | ADAM metallopeptidase with thrombospondin type 1 motif, 17 [Source:HGNC Symbol;Acc:17109] | |
| ADAMTS18 | ADAM metallopeptidase with thrombospondin type 1 motif, 18 | |
| ADAMTS20 | ADAM metallopeptidase with thrombospondin type 1 motif, 20 | |
| ADAMTS3 | ADAM metallopeptidase with thrombospondin type 1 motif, 3 | |
| ADAMTS5 | ADAM metallopeptidase with thrombospondin type 1 motif, 5 | |
| ADAMTS7 | ADAM metallopeptidase with thrombospondin type 1 motif, 7 | |
| ADAMTS9 | ADAM metallopeptidase with thrombospondin type 1 motif, 9 | |
| ADAMTSL1 | ADAMTS-like 1 | |
| ADAMTSL2 | ADAMTS-like 2 | |
| ADAMTSL4 | ADAMTS-like 4 | |
| ADARB1 | Adenosine deaminase, RNA-specific, B1 | |
| ADARB2 | Adenosine deaminase, RNA-specific, B2 | |
| ADAT1 | Adenosine deaminase, trna-specific 1 | |
| ADC | Arginine decarboxylase | |
| ADCK2 | Aarf domain containing kinase 2 | |
| ADCK3 | Aarf domain containing kinase 3 | |
| ADCK4 | Aarf domain containing kinase 4 | |
| ADCK5 | Aarf domain containing kinase 5 | |

| | | |
|------------------|--|--|
| ADCY1 | Adenylate cyclase 1 (brain) | |
| ADCY10 | Adenylate cyclase 10 (soluble) | |
| ADCY2 | Adenylate cyclase 2 (brain) | |
| ADCY4 | Adenylate cyclase 4 | |
| ADCY5 | Adenylate cyclase 5 | |
| ADCY6 | Adenylate cyclase 6 | |
| ADCY7 | Adenylate cyclase 7 | |
| ADCY9 | Adenylate cyclase 9 | |
| ADCYAP1R1 | Adenylate cyclase activating polypeptide 1 (pituitary) receptor type I | |
| ADD2 | Adducin 2 (beta) | |
| ADH1A | Alcohol dehydrogenase 1A (class I), alpha polypeptide | |
| ADH6 | Alcohol dehydrogenase 6 (class V) | |
| ADH7 | Alcohol dehydrogenase 7 (class IV), mu or sigma polypeptide | |
| ADHFE1 | Alcohol dehydrogenase, iron containing, 1 | |
| ADIPOR1 | Adiponectin receptor 1 | |
| ADNP | Activity-dependent neuroprotector homeobox | |
| ADNP2 | ADNP homeobox 2 | |
| ADORA2B | Adenosine A2b receptor | |
| ADORA3 | Adenosine A3 receptor | |
| ADPGK | ADP-dependent glucokinase | |
| ADRA1A | Adrenergic, alpha-1A-, receptor | |
| ADRA1B | Adrenergic, alpha-1B-, receptor | |
| ADRA1D | Adrenergic, alpha-1D-, receptor | |
| ADRB2 | Adrenergic, beta-2-, receptor, surface | |
| ADRBK2 | Adrenergic, beta, receptor kinase 2 | |
| ADSSL1 | Adenylosuccinate synthase like 1 | |
| AEBP1 | AE binding protein 1 | |
| AES | Amino-terminal enhancer of split | |
| AFAP1 | Actin filament associated protein 1 | |
| AFAP1L1 | Actin filament associated protein 1-like 1 | |
| AFAP1L2 | Actin filament associated protein 1-like 2 | |
| AFF3 | AF4/FMR2 family, member 3 | |
| AFG3L2 | AFG3 atpase family gene 3-like 2 (<i>S. Cerevisiae</i>) | |

| | | |
|---------------|---|--|
| AGAP1 | Arfgap with gtpase domain, ankyrin repeat and PH domain 1 | |
| AGAP2 | Arfgap with gtpase domain, ankyrin repeat and PH domain 2 | |
| AGAP9 | Arfgap with gtpase domain, ankyrin repeat and PH domain 9 | |
| AGBL2 | ATP/GTP binding protein-like 2 | |
| AGER | Advanced glycosylation end product-specific receptor | |
| AGFG2 | Arfgap with FG repeats 2 | |
| AGGF1 | Angiogenic factor with G patch and FHA domains 1 | |
| AGMAT | Agmatine ureohydrolase (agmatinase) | |
| AGMO | Alkylglycerol monooxygenase | |
| AGPAT1 | 1-acylglycerol-3-phosphate O-acyltransferase 1 (lysophosphatidic acid acyltransferase, alpha) | |
| AGPAT4 | 1-Acylglycerol-3-phosphate O-acyltransferase 4 (lysophosphatidic acid acyltransferase, delta) | |
| AGPAT5 | 1-Acylglycerol-3-phosphate O-acyltransferase 5 (lysophosphatidic acid acyltransferase, epsilon) | |
| AGPAT9 | 1-Acylglycerol-3-phosphate O-acyltransferase 9 | |
| AGPHD1 | Aminoglycoside phosphotransferase domain containing 1 | |
| AGRN | Agrin | |
| AGT | Angiotensinogen (serpin peptidase inhibitor, clade A, member 8) | |
| AGTR1 | Angiotensin II receptor, type 1 | |
| AGTRAP | Angiotensin II receptor-associated protein | |
| AGXT | Alanine-glyoxylate aminotransferase | |
| AHCTF1 | AT hook containing transcription factor 1 | |
| AHCY | Adenosylhomocysteinase | |
| AHCYL1 | Adenosylhomocysteinase-like 1 | |
| AHNAK | AHNAK nucleoprotein | |
| AHNAK2 | AHNAK nucleoprotein 2 | |
| AHR | Aryl hydrocarbon receptor | |
| AHSA2 | AHA1, activator of heat shock 90kda protein atpase homolog 2 (yeast) | |
| AIFM2 | Apoptosis-inducing factor, mitochondrion-associated, 2 | |
| AIG1 | Androgen-induced 1 | |
| AIM1L | Absent in melanoma 1-like | |
| AIMP2 | Aminoacyl trna synthetase complex-interacting multifunctional protein 2 | |

| | | |
|-------------------|--|---|
| AIP | Aryl hydrocarbon receptor interacting protein | |
| AIRE | Autoimmune regulator | |
| AJAP1 | Adherens junctions associated protein 1 | |
| AK1 | Adenylate kinase 1 | |
| AK7 | Adenylate kinase 7 | |
| AKAP1 | A kinase (PRKA) anchor protein 1 | |
| AKAP11 | A kinase (PRKA) anchor protein 11 | |
| AKAP12 | A kinase (PRKA) anchor protein 12 | |
| AKAP13 | A kinase (PRKA) anchor protein 13 | |
| AKAP2 | A kinase (PRKA) anchor protein 2 | |
| AKAP4 | A kinase (PRKA) anchor protein 4 | |
| AKAP6 | A kinase (PRKA) anchor protein 6 | |
| AKAP8L | A kinase (PRKA) anchor protein 8-like | |
| AKAP9 | A kinase (PRKA) anchor protein (yotiao) 9 | √ |
| AKR1B1 | Aldo-keto reductase family 1, member B1 (aldose reductase) | |
| AKR1D1 | Aldo-keto reductase family 1, member D1 (delta 4-3-ketosteroid-5-beta-reductase) | |
| AKR7L | Aldo-keto reductase family 7-like | |
| AKT3 | V-akt murine thymoma viral oncogene homolog 3 (protein kinase B, gamma) | |
| AKTIP | AKT interacting protein | |
| AL022341.2 | cDNA FLJ59058 | |
| AL033381.1 | cDNA FLJ34594 fis, clone KIDNE2009109 | |
| AL049840.1 | cDNA FLJ53535 | |
| AL078585.1 | cDNA FLJ58069 | |
| AL117190.3 | cDNA FLJ42589 fis, clone BRACE3009701 | |
| AL121595.1 | | |
| AL122001.2 | NOL1/NOP2/Sun domain family member 4 | |
| AL133216.1 | | |
| AL137145.1 | | |
| AL139010.1 | HCG1995134cDNA FLJ33235 fis, clone ASTRO2002202 | |
| AL139300.1 | UPF0671 protein c14orf153 | |
| AL157996.1 | UPF0639 protein | |
| AL162407.1 | CDNA FLJ20147 fis, clone COL07954HCG1781466 | |

| | | |
|-------------------|---|--|
| AL353597.1 | | |
| AL353996.1 | | |
| AL354898.1 | Hemicentin-2 | |
| AL355149.1 | | |
| AL356356.1 | | |
| AL358216.1 | CDNA FLJ26714 fis, clone PNC01043 [Source:uniprotkb/trembl;Acc:Q6ZP19] | |
| AL359075.1 | Protein transport protein Sec16B | |
| AL359195.1 | Cdna FLJ46261 fis, clone TESTI4025062 | |
| AL359266.1 | | |
| AL359644.2 | Inactive N-acetyllactosaminide alpha-1,3-galactosyltransferase | |
| AL359853.4 | Torsin-1A-interacting protein 2 | |
| AL360181.1 | Mitochondrial gtpase 1 | |
| AL390816.1 | UPF0730 protein CS0DE013YM09 | |
| AL391277.1 | Cdna FLJ10894 fis, clone NT2RP4002888, highly similar to Homo sapiens mrna; cdna dkfzp434f172 | |
| AL442069.1 | Cdna FLJ43764 fis, clone TESTI2048898 | |
| AL445163.2 | CDNA FLJ26873 fis, clone PRS08805 [Source:uniprotkb/trembl;Acc:Q6ZNY8] | |
| AL450307.1 | Cdna FLJ46300 fis, clone TESTI4035989 [Source:uniprotkb/trembl;Acc:Q6ZRK0] | |
| AL669970.1 | | |
| AL683812.1 | CDNA FLJ25733 fis, clone TST05652 [Source:uniprotkb/trembl;Acc:Q8N7E4] | |
| ALAD | Aminolevulinate dehydratase [Source:HGNC Symbol;Acc:395] | |
| ALAS1 | Aminolevulinate, delta-, synthase 1 [Source:HGNC Symbol;Acc:396] | |
| ALDH1A1 | Aldehyde dehydrogenase 1 family, member A1 [Source:HGNC Symbol;Acc:402] | |
| ALDH1A2 | Aldehyde dehydrogenase 1 family, member A2 [Source:HGNC Symbol;Acc:15472] | |
| ALDH1A3 | Aldehyde dehydrogenase 1 family, member A3 [Source:HGNC Symbol;Acc:409] | |

| | | |
|-----------------|--|--|
| ALDH1B1 | Aldehyde dehydrogenase 1 family, member B1 [Source:HGNC Symbol;Acc:407] | |
| ALDH1L2 | Aldehyde dehydrogenase 1 family, member L2 [Source:HGNC Symbol;Acc:26777] | |
| ALDH3A2 | Aldehyde dehydrogenase 3 family, member A2 [Source:HGNC Symbol;Acc:403] | |
| ALDH6A1 | Aldehyde dehydrogenase 6 family, member A1 [Source:HGNC Symbol;Acc:7179] | |
| ALDH7A1 | Aldehyde dehydrogenase 7 family, member A1 [Source:HGNC Symbol;Acc:877] | |
| ALDH8A1 | Aldehyde dehydrogenase 8 family, member A1 [Source:HGNC Symbol;Acc:15471] | |
| ALDH9A1 | Aldehyde dehydrogenase 9 family, member A1 [Source:HGNC Symbol;Acc:412] | |
| ALDOA | Aldolase A, fructose-bisphosphate [Source:HGNC Symbol;Acc:414] | |
| ALG10B | Asparagine-linked glycosylation 10, alpha-1,2-glucosyltransferase homolog B (yeast) [Source:HGNC Symbol;Acc:31088] | |
| ALG13 | Asparagine-linked glycosylation 13 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:30881] | |
| ALMS1 | Alstrom syndrome 1 [Source:HGNC Symbol;Acc:428] | |
| ALPK1 | Alpha-kinase 1 [Source:HGNC Symbol;Acc:20917] | |
| ALPK3 | Alpha-kinase 3 [Source:HGNC Symbol;Acc:17574] | |
| ALS2CL | ALS2 C-terminal like [Source:HGNC Symbol;Acc:20605] | |
| ALS2CR11 | Amyotrophic lateral sclerosis 2 (juvenile) chromosome region, candidate 11 [Source:HGNC Symbol;Acc:14438] | |
| ALS2CR4 | Amyotrophic lateral sclerosis 2 (juvenile) chromosome region, candidate 4 [Source:HGNC Symbol;Acc:14432] | |
| ALS2CR8 | Amyotrophic lateral sclerosis 2 (juvenile) chromosome region, candidate 8 [Source:HGNC Symbol;Acc:14435] | |
| ALX4 | ALX homeobox 4 [Source:HGNC Symbol;Acc:450] | |
| AMAC1 | Acyl-malonyl condensing enzyme 1 [Source:HGNC Symbol;Acc:26848] | |
| AMAC1L2 | Acyl-malonyl condensing enzyme 1-like 2 [Source:HGNC Symbol;Acc:15546] | |

| | | |
|----------------|--|--|
| AMBP | Alpha-1-microglobulin/bikunin precursor [Source:HGNC Symbol;Acc:453] | |
| AMBRA1 | Autophagy/beclin-1 regulator 1 [Source:HGNC Symbol;Acc:25990] | |
| AMD1 | Adenosylmethionine decarboxylase 1 [Source:HGNC Symbol;Acc:457] | |
| AMFR | Autocrine motility factor receptor [Source:HGNC Symbol;Acc:463] | |
| AMHR2 | Anti-Mullerian hormone receptor, type II [Source:HGNC Symbol;Acc:465] | |
| AMICA1 | Adhesion molecule, interacts with CXADR antigen 1 [Source:HGNC Symbol;Acc:19084] | |
| AMIGO3 | Adhesion molecule with Ig-like domain 3 [Source:HGNC Symbol;Acc:24075] | |
| AMN | Amnionless homolog (mouse) [Source:HGNC Symbol;Acc:14604] | |
| AMOT | Angiomotin [Source:HGNC Symbol;Acc:17810] | |
| AMOTL1 | Angiomotin like 1 [Source:HGNC Symbol;Acc:17811] | |
| AMPD2 | Adenosine monophosphate deaminase 2 [Source:HGNC Symbol;Acc:469] | |
| AMPD3 | Adenosine monophosphate deaminase 3 [Source:HGNC Symbol;Acc:470] | |
| AMTN | Amelotin [Source:HGNC Symbol;Acc:33188] | |
| AMY1A | Amylase, alpha 1A (salivary) [Source:HGNC Symbol;Acc:474] | |
| AMY1B | Amylase, alpha 1B (salivary) [Source:HGNC Symbol;Acc:475] | |
| ANAPC1 | Anaphase promoting complex subunit 1 [Source:HGNC Symbol;Acc:19988] | |
| ANAPC5 | Anaphase promoting complex subunit 5 [Source:HGNC Symbol;Acc:15713] | |
| ANAPC7 | Anaphase promoting complex subunit 7 [Source:HGNC Symbol;Acc:17380] | |
| ANGEL1 | Angel homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:19961] | |
| ANGEL2 | Angel homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:30534] | |
| ANGPT4 | Angiopoietin 4 [Source:HGNC Symbol;Acc:487] | |
| ANGPTL2 | Angiopoietin-like 2 [Source:HGNC Symbol;Acc:490] | |
| ANK3 | Ankyrin 3, node of Ranvier (ankyrin G) [Source:HGNC Symbol;Acc:494] | |
| ANKDD1A | Ankyrin repeat and death domain containing 1A [Source:HGNC Symbol;Acc:28002] | |
| ANKFY1 | Ankyrin repeat and FYVE domain containing 1 [Source:HGNC Symbol;Acc:20763] | |
| ANKH | Ankylosis, progressive homolog (mouse) [Source:HGNC Symbol;Acc:15492] | |
| ANKHD1 | Ankyrin repeat and KH domain containing 1 [Source:HGNC Symbol;Acc:24714] | |

| | | |
|------------------|---|--|
| ANKLE2 | Ankyrin repeat and LEM domain containing 2 [Source:HGNC Symbol;Acc:29101] | |
| ANKMY1 | Ankyrin repeat and MYND domain containing 1 [Source:HGNC Symbol;Acc:20987] | |
| ANKMY2 | Ankyrin repeat and MYND domain containing 2 [Source:HGNC Symbol;Acc:25370] | |
| ANKRD10 | Ankyrin repeat domain 10 [Source:HGNC Symbol;Acc:20265] | |
| ANKRD11 | Ankyrin repeat domain 11 [Source:HGNC Symbol;Acc:21316] | |
| ANKRD12 | Ankyrin repeat domain 12 [Source:HGNC Symbol;Acc:29135] | |
| ANKRD17 | Ankyrin repeat domain 17 [Source:HGNC Symbol;Acc:23575] | |
| ANKRD18A | Ankyrin repeat domain 18A [Source:HGNC Symbol;Acc:23643] | |
| ANKRD18B | Ankyrin repeat domain 18B [Source:HGNC Symbol;Acc:23644] | |
| ANKRD20A3 | Ankyrin repeat domain 20 family, member A3 [Source:HGNC Symbol;Acc:31981] | |
| ANKRD20A4 | Ankyrin repeat domain 20 family, member A4 [Source:HGNC Symbol;Acc:31982] | |
| ANKRD22 | Ankyrin repeat domain 22 [Source:HGNC Symbol;Acc:28321] | |
| ANKRD26 | Ankyrin repeat domain 26 [Source:HGNC Symbol;Acc:29186] | |
| ANKRD28 | Ankyrin repeat domain 28 [Source:HGNC Symbol;Acc:29024] | |
| ANKRD29 | Ankyrin repeat domain 29 [Source:HGNC Symbol;Acc:27110] | |
| ANKRD30B | Ankyrin repeat domain 30B [Source:HGNC Symbol;Acc:24165] | |
| ANKRD31 | Ankyrin repeat domain 31 [Source:HGNC Symbol;Acc:26853] | |
| ANKRD34B | Ankyrin repeat domain 34B [Source:HGNC Symbol;Acc:33736] | |
| ANKRD37 | Ankyrin repeat domain 37 [Source:HGNC Symbol;Acc:29593] | |
| ANKRD40 | Ankyrin repeat domain 40 [Source:HGNC Symbol;Acc:28233] | |
| ANKRD43 | Ankyrin repeat domain 43 [Source:HGNC Symbol;Acc:27033] | |
| ANKRD49 | Ankyrin repeat domain 49 [Source:HGNC Symbol;Acc:25970] | |
| ANKRD52 | Ankyrin repeat domain 52 [Source:HGNC Symbol;Acc:26614] | |
| ANKRD53 | Ankyrin repeat domain 53 [Source:HGNC Symbol;Acc:25691] | |
| ANKRD57 | Ankyrin repeat domain 57 [Source:HGNC Symbol;Acc:26149] | |
| ANKS3 | Ankyrin repeat and sterile alpha motif domain containing 3 [Source:HGNC Symbol;Acc:29422] | |

| | | |
|-------------------|--|--|
| ANKS6 | Ankyrin repeat and sterile alpha motif domain containing 6 [Source:HGNC Symbol;Acc:26724] | |
| ANO2 | Anoctamin 2 [Source:HGNC Symbol;Acc:1183] | |
| ANO4 | Anoctamin 4 [Source:HGNC Symbol;Acc:23837] | |
| ANO6 | Anoctamin 6 [Source:HGNC Symbol;Acc:25240] | |
| ANO8 | Anoctamin 8 [Source:HGNC Symbol;Acc:29329] | |
| ANTXR1 | Anthrax toxin receptor 1 [Source:HGNC Symbol;Acc:21014] | |
| ANTXR2 | Anthrax toxin receptor 2 [Source:HGNC Symbol;Acc:21732] | |
| ANXA11 | Annexin A11 [Source:HGNC Symbol;Acc:535] | |
| ANXA2 | Annexin A2 [Source:HGNC Symbol;Acc:537] | |
| ANXA5 | Annexin A5 [Source:HGNC Symbol;Acc:543] | |
| ANXA8 | Annexin A8 [Source:HGNC Symbol;Acc:546] | |
| ANXA8L1 | Annexin A8-like 1 [Source:HGNC Symbol;Acc:23334] | |
| ANXA8L2 | Annexin A8-like 2 [Source:HGNC Symbol;Acc:23335] | |
| AOAH | Acyloxyacyl hydrolase (neutrophil) [Source:HGNC Symbol;Acc:548] | |
| AOC2 | Amine oxidase, copper containing 2 (retina-specific) [Source:HGNC Symbol;Acc:549] | |
| AOX1 | Aldehyde oxidase 1 [Source:HGNC Symbol;Acc:553] | |
| AP000708.1 | | |
| AP000859.2 | HCG2033177cDNA FLJ30908 fis, clone FEBRA2006150 [Source:uniprotkb/trembl;Acc:Q96NH1] | |
| AP000907.1 | Heat shock protein beta-2 [Source:uniprotkb/Swiss-Prot;Acc:Q16082] | |
| AP001046.1 | Uncharacterized protein c21orf136 [Source:uniprotkb/Swiss-Prot;Acc:Q6ZN03] | |
| AP001781.2 | Ferredoxin-fold anticodon-binding domain-containing protein 1 [Source:uniprotkb/Swiss-Prot;Acc:Q9BRP7] | |
| AP002986.1 | Cdna FLJ41054 fis, clone STOMA1000189 [Source:uniprotkb/trembl;Acc:Q6ZWH7] | |
| AP003774.4 | HCG1652096, isoform CRA_acdna FLJ37045 fis, clone BRACE2012185 [Source:uniprotkb/trembl;Acc:Q8N9J4] | |
| AP1B1 | Adaptor-related protein complex 1, beta 1 subunit [Source:HGNC Symbol;Acc:554] | |

| | | |
|----------------|---|--|
| AP1G1 | Adaptor-related protein complex 1, gamma 1 subunit [Source:HGNC Symbol;Acc:555] | |
| AP1S2 | Adaptor-related protein complex 1, sigma 2 subunit [Source:HGNC Symbol;Acc:560] | |
| AP2A2 | Adaptor-related protein complex 2, alpha 2 subunit [Source:HGNC Symbol;Acc:562] | |
| AP3B1 | Adaptor-related protein complex 3, beta 1 subunit [Source:HGNC Symbol;Acc:566] | |
| AP3M1 | Adaptor-related protein complex 3, mu 1 subunit [Source:HGNC Symbol;Acc:569] | |
| AP3M2 | Adaptor-related protein complex 3, mu 2 subunit [Source:HGNC Symbol;Acc:570] | |
| AP3S2 | Adaptor-related protein complex 3, sigma 2 subunit [Source:HGNC Symbol;Acc:571] | |
| AP4E1 | Adaptor-related protein complex 4, epsilon 1 subunit [Source:HGNC Symbol;Acc:573] | |
| APBB1 | Amyloid beta (A4) precursor protein-binding, family B, member 1 (Fe65) [Source:HGNC Symbol;Acc:581] | |
| APCDD1 | Adenomatosis polyposis coli down-regulated 1 [Source:HGNC Symbol;Acc:15718] | |
| APCDD1L | Adenomatosis polyposis coli down-regulated 1-like [Source:HGNC Symbol;Acc:26892] | |
| APCS | Amyloid P component, serum [Source:HGNC Symbol;Acc:584] | |
| APEX2 | APEX nuclease (apurinic/apurimidinic endonuclease) 2 [Source:HGNC Symbol;Acc:17889] | |
| APIP | APAF1 interacting protein [Source:HGNC Symbol;Acc:17581] | |
| APLF | Aprataxin and PNKP like factor [Source:HGNC Symbol;Acc:28724] | |
| APLN | Apelin [Source:HGNC Symbol;Acc:16665] | |
| APLP1 | Amyloid beta (A4) precursor-like protein 1 [Source:HGNC Symbol;Acc:597] | |
| APLP2 | Amyloid beta (A4) precursor-like protein 2 [Source:HGNC Symbol;Acc:598] | |
| APOA1 | Apolipoprotein A-I [Source:HGNC Symbol;Acc:600] | |

| | | |
|----------------|--|--|
| APOA4 | Apolipoprotein A-IV [Source:HGNC Symbol;Acc:602] | |
| APOB | Apolipoprotein B (including Ag(x) antigen) [Source:HGNC Symbol;Acc:603] | |
| APOBEC4 | Apolipoprotein B mrna editing enzyme, catalytic polypeptide-like 4 (putative) [Source:HGNC Symbol;Acc:32152] | |
| APOH | Apolipoprotein H (beta-2-glycoprotein I) [Source:HGNC Symbol;Acc:616] | |
| APOLD1 | Apolipoprotein L domain containing 1 [Source:HGNC Symbol;Acc:25268] | |
| APOM | Apolipoprotein M [Source:HGNC Symbol;Acc:13916] | |
| APP | Amyloid beta (A4) precursor protein [Source:HGNC Symbol;Acc:620] | |
| APPBP2 | Amyloid beta precursor protein (cytoplasmic tail) binding protein 2 [Source:HGNC Symbol;Acc:622] | |
| APPL1 | Adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 1 [Source:HGNC Symbol;Acc:24035] | |
| APRT | Adenine phosphoribosyltransferase [Source:HGNC Symbol;Acc:626] | |
| APTAX | Aprataxin [Source:HGNC Symbol;Acc:15984] | |
| AQP1 | Aquaporin 1 (Colton blood group) [Source:HGNC Symbol;Acc:633] | |
| AQP10 | Aquaporin 10 [Source:HGNC Symbol;Acc:16029] | |
| AQP2 | Aquaporin 2 (collecting duct) [Source:HGNC Symbol;Acc:634] | |
| AQP8 | Aquaporin 8 [Source:HGNC Symbol;Acc:642] | |
| AQP9 | Aquaporin 9 [Source:HGNC Symbol;Acc:643] | |
| AQR | Aquarius homolog (mouse) [Source:HGNC Symbol;Acc:29513] | |
| AR | Androgen receptor [Source:HGNC Symbol;Acc:644] | |
| ARAP2 | Arfgap with rhogap domain, ankyrin repeat and PH domain 2 [Source:HGNC Symbol;Acc:16924] | |
| ARCN1 | Archain 1 [Source:HGNC Symbol;Acc:649] | |
| ARF3 | ADP-ribosylation factor 3 [Source:HGNC Symbol;Acc:654] | |
| ARFGAP1 | ADP-ribosylation factor gtpase activating protein 1 [Source:HGNC Symbol;Acc:15852] | |
| ARFGAP3 | ADP-ribosylation factor gtpase activating protein 3 [Source:HGNC Symbol;Acc:661] | |
| ARFGEF1 | ADP-ribosylation factor guanine nucleotide-exchange factor 1(brefeldin A-inhibited) [Source:HGNC Symbol;Acc:15772] | |

| | | |
|------------------|---|---|
| ARFGEF2 | ADP-ribosylation factor guanine nucleotide-exchange factor 2 (brefeldin A-inhibited) [Source:HGNC Symbol;Acc:15853] | |
| ARFRP1 | ADP-ribosylation factor related protein 1 [Source:HGNC Symbol;Acc:662] | |
| ARHGAP1 | Rho gtpase activating protein 1 [Source:HGNC Symbol;Acc:673] | |
| ARHGAP11A | Rho gtpase activating protein 11A [Source:HGNC Symbol;Acc:15783] | |
| ARHGAP18 | Rho gtpase activating protein 18 [Source:HGNC Symbol;Acc:21035] | |
| ARHGAP19 | Rho gtpase activating protein 19 [Source:HGNC Symbol;Acc:23724] | |
| ARHGAP25 | Rho gtpase activating protein 25 [Source:HGNC Symbol;Acc:28951] | |
| ARHGAP26 | Rho gtpase activating protein 26 [Source:HGNC Symbol;Acc:17073] | |
| ARHGAP29 | Rho gtpase activating protein 29 [Source:HGNC Symbol;Acc:30207] | |
| ARHGAP31 | Rho gtpase activating protein 31 [Source:HGNC Symbol;Acc:29216] | |
| ARHGAP32 | Rho gtpase activating protein 32 [Source:HGNC Symbol;Acc:17399] | |
| ARHGAP39 | Rho gtpase activating protein 39 | |
| ARHGAP40 | Rho gtpase activating protein 40 | |
| ARHGAP44 | Rho gtpase activating protein 44 | |
| ARHGAP5 | Rho gtpase activating protein 5 | |
| ARHGAP6 | Rho gtpase activating protein 6 | |
| ARHGEF11 | Rho guanine nucleotide exchange factor (GEF) 11 | |
| ARHGEF12 | Rho guanine nucleotide exchange factor (GEF) 12 | √ |
| ARHGEF17 | Rho guanine nucleotide exchange factor (GEF) 17 | |
| ARHGEF2 | Rho/Rac guanine nucleotide exchange factor (GEF) 2 | |
| ARHGEF37 | Rho guanine nucleotide exchange factor (GEF) 37 | |
| ARHGEF38 | Rho guanine nucleotide exchange factor (GEF) 38 | |
| ARHGEF4 | Rho guanine nucleotide exchange factor (GEF) 4 | |
| ARHGEF5 | Rho guanine nucleotide exchange factor (GEF) 5 [Source:HGNC Symbol;Acc:13209] | |
| ARHGEF7 | Rho guanine nucleotide exchange factor (GEF) 7 [Source:HGNC Symbol;Acc:15607] | |
| ARID2 | AT rich interactive domain 2 (ARID, RFX-like) | √ |
| ARID3B | AT rich interactive domain 3B (BRIGHT-like) [Source:HGNC Symbol;Acc:14350] | |
| ARID4A | AT rich interactive domain 4A (RBP1-like) [Source:HGNC Symbol;Acc:9885] | |

| | | |
|---------------|---|---|
| ARID4B | AT rich interactive domain 4B (RBP1-like) [Source:HGNC Symbol;Acc:15550] | |
| ARIH1 | Ariadne homolog, ubiquitin-conjugating enzyme E2 binding protein, 1 (Drosophila) [Source:HGNC Symbol;Acc:689] | |
| ARL1 | ADP-ribosylation factor-like 1 [Source:HGNC Symbol;Acc:692] | |
| ARL10 | ADP-ribosylation factor-like 10 [Source:HGNC Symbol;Acc:22042] | |
| ARL14 | ADP-ribosylation factor-like 14 [Source:HGNC Symbol;Acc:22974] | |
| ARL15 | ADP-ribosylation factor-like 15 [Source:HGNC Symbol;Acc:25945] | |
| ARL17A | ADP-ribosylation factor-like 17A [Source:HGNC Symbol;Acc:24096] | |
| ARL17B | ADP-ribosylation factor-like 17B [Source:HGNC Symbol;Acc:32387] | |
| ARL2BP | ADP-ribosylation factor-like 2 binding protein [Source:HGNC Symbol;Acc:17146] | |
| ARL4C | ADP-ribosylation factor-like 4C [Source:HGNC Symbol;Acc:698] | |
| ARL4D | ADP-ribosylation factor-like 4D [Source:HGNC Symbol;Acc:656] | |
| ARL5A | ADP-ribosylation factor-like 5A [Source:HGNC Symbol;Acc:696] | |
| ARL8A | ADP-ribosylation factor-like 8A [Source:HGNC Symbol;Acc:25192] | |
| ARMC1 | Armadillo repeat containing 1 [Source:HGNC Symbol;Acc:17684] | |
| ARMC10 | Armadillo repeat containing 10 [Source:HGNC Symbol;Acc:21706] | |
| ARMC6 | Armadillo repeat containing 6 [Source:HGNC Symbol;Acc:25049] | |
| ARMC7 | Armadillo repeat containing 7 [Source:HGNC Symbol;Acc:26168] | |
| ARMC9 | Armadillo repeat containing 9 [Source:HGNC Symbol;Acc:20730] | |
| ARMCX1 | Armadillo repeat containing, X-linked 1 [Source:HGNC Symbol;Acc:18073] | |
| ARMCX4 | Armadillo repeat containing, X-linked 4 [Source:HGNC Symbol;Acc:28615] | |
| ARNT | Aryl hydrocarbon receptor nuclear translocator | √ |
| ARNT2 | Aryl-hydrocarbon receptor nuclear translocator 2 [Source:HGNC Symbol;Acc:16876] | |
| ARPC1A | Actin related protein 2/3 complex, subunit 1A, 41kda [Source:HGNC Symbol;Acc:703] | |
| ARR3 | Arrestin 3, retinal (X-arrestin) [Source:HGNC Symbol;Acc:710] | |
| ARRDC2 | Arrestin domain containing 2 [Source:HGNC Symbol;Acc:25225] | |
| ARRDC5 | Arrestin domain containing 5 [Source:HGNC Symbol;Acc:31407] | |
| ARSA | Arylsulfatase A [Source:HGNC Symbol;Acc:713] | |
| ARSI | Arylsulfatase family, member I [Source:HGNC Symbol;Acc:32521] | |

| | | |
|---------------|---|--|
| ART3 | ADP-ribosyltransferase 3 [Source:HGNC Symbol;Acc:725] | |
| ART4 | ADP-ribosyltransferase 4 (Dombrock blood group) [Source:HGNC Symbol;Acc:726] | |
| ARV1 | ARV1 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:29561] | |
| ARVCF | Armadillo repeat gene deleted in velocardiofacial syndrome [Source:HGNC Symbol;Acc:728] | |
| ASAH2 | N-acylsphingosine amidohydrolase (non-lysosomal ceramidase) 2 [Source:HGNC Symbol;Acc:18860] | |
| ASAH2B | N-acylsphingosine amidohydrolase (non-lysosomal ceramidase) 2B [Source:HGNC Symbol;Acc:23456] | |
| ASAP2 | Arfgap with SH3 domain, ankyrin repeat and PH domain 2 [Source:HGNC Symbol;Acc:2721] | |
| ASB12 | Ankyrin repeat and SOCS box containing 12 [Source:HGNC Symbol;Acc:19763] | |
| ASB13 | Ankyrin repeat and SOCS box containing 13 [Source:HGNC Symbol;Acc:19765] | |
| ASB3 | Ankyrin repeat and SOCS box containing 3 [Source:HGNC Symbol;Acc:16013] | |
| ASB4 | Ankyrin repeat and SOCS box containing 4 [Source:HGNC Symbol;Acc:16009] | |
| ASB7 | Ankyrin repeat and SOCS box containing 7 [Source:HGNC Symbol;Acc:17182] | |
| ASB8 | Ankyrin repeat and SOCS box containing 8 [Source:HGNC Symbol;Acc:17183] | |
| ASCC2 | Activating signal cointegrator 1 complex subunit 2 [Source:HGNC Symbol;Acc:24103] | |
| ASCC3 | Activating signal cointegrator 1 complex subunit 3 [Source:HGNC Symbol;Acc:18697] | |
| ASH1L | Ash1 (absent, small, or homeotic)-like (Drosophila) [Source:HGNC Symbol;Acc:19088] | |
| ASMTL | Acetylserotonin O-methyltransferase-like [Source:HGNC Symbol;Acc:751] | |
| ASNA1 | Arsa arsenite transporter, ATP-binding, homolog 1 (bacterial) [Source:HGNC Symbol;Acc:752] | |

| | | |
|----------------|--|---|
| ASNSD1 | Asparagine synthetase domain containing 1 [Source:HGNC Symbol;Acc:24910] | |
| ASPA | Aspartoacylase [Source:HGNC Symbol;Acc:756] | |
| ASPHD1 | Aspartate beta-hydroxylase domain containing 1 [Source:HGNC Symbol;Acc:27380] | |
| ASPHD2 | Aspartate beta-hydroxylase domain containing 2 [Source:HGNC Symbol;Acc:30437] | |
| ASTN2 | Astrotactin 2 [Source:HGNC Symbol;Acc:17021] | |
| ASXL1 | Additional sex combs like 1 (Drosophila) | √ |
| ASXL2 | Additional sex combs like 2 (Drosophila) [Source:HGNC Symbol;Acc:23805] | |
| ATAD2 | Atpase family, AAA domain containing 2 [Source:HGNC Symbol;Acc:30123] | |
| ATAD2B | Atpase family, AAA domain containing 2B [Source:HGNC Symbol;Acc:29230] | |
| ATAT1 | Alpha tubulin acetyltransferase 1 [Source:HGNC Symbol;Acc:21186] | |
| ATCAY | Ataxia, cerebellar, Cayman type [Source:HGNC Symbol;Acc:779] | |
| ATE1 | Arginyltransferase 1 [Source:HGNC Symbol;Acc:782] | |
| ATF4 | Activating transcription factor 4 (tax-responsive enhancer element B67) [Source:HGNC Symbol;Acc:786] | |
| ATF6 | Activating transcription factor 6 [Source:HGNC Symbol;Acc:791] | |
| ATF7 | Activating transcription factor 7 [Source:HGNC Symbol;Acc:792] | |
| ATF7IP2 | Activating transcription factor 7 interacting protein 2 [Source:HGNC Symbol;Acc:20397] | |
| ATG10 | ATG10 autophagy related 10 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:20315] | |
| ATG12 | ATG12 autophagy related 12 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:588] | |
| ATG16L1 | ATG16 autophagy related 16-like 1 (S. Cerevisiae) [Source:HGNC Symbol;Acc:21498] | |
| ATG2A | ATG2 autophagy related 2 homolog A (S. Cerevisiae) [Source:HGNC Symbol;Acc:29028] | |

| | | |
|----------------|---|---|
| ATG5 | ATG5 autophagy related 5 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:589] | |
| ATG7 | ATG7 autophagy related 7 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:16935] | |
| ATG9A | ATG9 autophagy related 9 homolog A (S. Cerevisiae) [Source:HGNC Symbol;Acc:22408] | |
| ATL2 | Atlastin gtpase 2 [Source:HGNC Symbol;Acc:24047] | |
| ATL3 | Atlastin gtpase 3 [Source:HGNC Symbol;Acc:24526] | |
| ATM | Ataxia telangiectasia mutated | √ |
| ATM | Ataxia telangiectasia mutated [Source:HGNC Symbol;Acc:795] | |
| ATMIN | ATM interactor [Source:HGNC Symbol;Acc:29034] | |
| ATN1 | Atrophin 1 [Source:HGNC Symbol;Acc:3033] | |
| ATOH7 | Atonal homolog 7 (Drosophila) [Source:HGNC Symbol;Acc:13907] | |
| ATOX1 | ATX1 antioxidant protein 1 homolog (yeast) [Source:HGNC Symbol;Acc:798] | |
| ATP10A | Atpase, class V, type 10A [Source:HGNC Symbol;Acc:13542] | |
| ATP10B | Atpase, class V, type 10B [Source:HGNC Symbol;Acc:13543] | |
| ATP11A | Atpase, class VI, type 11A [Source:HGNC Symbol;Acc:13552] | |
| ATP11B | Atpase, class VI, type 11B [Source:HGNC Symbol;Acc:13553] | |
| ATP11C | Atpase, class VI, type 11C [Source:HGNC Symbol;Acc:13554] | |
| ATP12A | Atpase, H ⁺ /K ⁺ transporting, nongastric, alpha polypeptide [Source:HGNC Symbol;Acc:13816] | |
| ATP13A2 | Atpase type 13A2 [Source:HGNC Symbol;Acc:30213] | |
| ATP13A3 | Atpase type 13A3 [Source:HGNC Symbol;Acc:24113] | |
| ATP13A4 | Atpase type 13A4 [Source:HGNC Symbol;Acc:25422] | |
| ATP13A5 | Atpase type 13A5 [Source:HGNC Symbol;Acc:31789] | |
| ATP1A1 | ATPase, Na ⁺ /K ⁺ transporting, α1 polypeptide | √ |
| ATP1A2 | Atpase, Na ⁺ /K ⁺ transporting, alpha 2 polypeptide [Source:HGNC Symbol;Acc:800] | |
| ATP1A4 | Atpase, Na ⁺ /K ⁺ transporting, alpha 4 polypeptide [Source:HGNC Symbol;Acc:14073] | |

| | | |
|-----------------|--|--|
| ATP1B2 | Atpase, Na ⁺ /K ⁺ transporting, beta 2 polypeptide [Source:HGNC Symbol;Acc:805] | |
| ATP2A1 | Atpase, Ca ⁺⁺ transporting, cardiac muscle, fast twitch 1 [Source:HGNC Symbol;Acc:811] | |
| ATP2A2 | Atpase, Ca ⁺⁺ transporting, cardiac muscle, slow twitch 2 [Source:HGNC Symbol;Acc:812] | |
| ATP2B1 | Atpase, Ca ⁺⁺ transporting, plasma membrane 1 [Source:HGNC Symbol;Acc:814] | |
| ATP2C1 | Atpase, Ca ⁺⁺ transporting, type 2C, member 1 [Source:HGNC Symbol;Acc:13211] | |
| ATP4A | Atpase, H ⁺ /K ⁺ exchanging, alpha polypeptide [Source:HGNC Symbol;Acc:819] | |
| ATP5B | ATP synthase, H ⁺ transporting, mitochondrial F1 complex, beta polypeptide [Source:HGNC Symbol;Acc:830] | |
| ATP5E | ATP synthase, H ⁺ transporting, mitochondrial F1 complex, epsilon subunit [Source:HGNC Symbol;Acc:838] | |
| ATP5F1 | ATP synthase, H ⁺ transporting, mitochondrial Fo complex, subunit B1 [Source:HGNC Symbol;Acc:840] | |
| ATP5G3 | ATP synthase, H ⁺ transporting, mitochondrial Fo complex, subunit C3 (subunit 9) [Source:HGNC Symbol;Acc:843] | |
| ATP5L2 | ATP synthase, H ⁺ transporting, mitochondrial Fo complex, subunit G2 [Source:HGNC Symbol;Acc:13213] | |
| ATP5SL | ATP5S-like [Source:HGNC Symbol;Acc:25496] | |
| ATP6AP1L | Atpase, H ⁺ transporting, lysosomal accessory protein 1-like [Source:HGNC Symbol;Acc:28091] | |
| ATP6V0A1 | Atpase, H ⁺ transporting, lysosomal V0 subunit a1 [Source:HGNC Symbol;Acc:865] | |
| ATP6V0A2 | Atpase, H ⁺ transporting, lysosomal V0 subunit a2 [Source:HGNC Symbol;Acc:18481] | |
| ATP6V0E2 | Atpase, H ⁺ transporting V0 subunit e2 [Source:HGNC Symbol;Acc:21723] | |
| ATP6V1D | Atpase, H ⁺ transporting, lysosomal 34kda, V1 subunit D [Source:HGNC Symbol;Acc:13527] | |

| | | |
|-----------------|---|---|
| ATP6V1G2 | Atpase, H ⁺ transporting, lysosomal 13kda, V1 subunit G2 [Source:HGNC Symbol;Acc:862] | |
| ATP7B | Atpase, Cu ⁺⁺ transporting, beta polypeptide [Source:HGNC Symbol;Acc:870] | |
| ATP8A1 | Atpase, aminophospholipid transporter (APLT), class I, type 8A, member 1 [Source:HGNC Symbol;Acc:13531] | |
| ATP8A2 | Atpase, aminophospholipid transporter, class I, type 8A, member 2 [Source:HGNC Symbol;Acc:13533] | |
| ATP8B1 | Atpase, aminophospholipid transporter, class I, type 8B, member 1 [Source:HGNC Symbol;Acc:3706] | |
| ATP9A | Atpase, class II, type 9A [Source:HGNC Symbol;Acc:13540] | |
| ATP9B | Atpase, class II, type 9B [Source:HGNC Symbol;Acc:13541] | |
| ATPAF1 | ATP synthase mitochondrial F1 complex assembly factor 1 [Source:HGNC Symbol;Acc:18803] | |
| ATPAF2 | ATP synthase mitochondrial F1 complex assembly factor 2 [Source:HGNC Symbol;Acc:18802] | |
| ATR | Ataxia telangiectasia and Rad3 related [Source:HGNC Symbol;Acc:882] | |
| ATRN | Attractin [Source:HGNC Symbol;Acc:885] | |
| ATRNL1 | Attractin-like 1 [Source:HGNC Symbol;Acc:29063] | |
| ATRX | Alpha thalassemia/mental retardation syndrome X-linked | √ |
| ATXN1 | Ataxin 1 [Source:HGNC Symbol;Acc:10548] | |
| ATXN3 | Ataxin 3 [Source:HGNC Symbol;Acc:7106] | |
| ATXN7 | Ataxin 7 [Source:HGNC Symbol;Acc:10560] | |
| ATXN7L1 | Ataxin 7-like 1 [Source:HGNC Symbol;Acc:22210] | |
| AUP1 | Ancient ubiquitous protein 1 [Source:HGNC Symbol;Acc:891] | |
| AVL9 | AVL9 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:28994] | |
| AVPR2 | Arginine vasopressin receptor 2 [Source:HGNC Symbol;Acc:897] | |
| AWAT2 | Acyl-coa wax alcohol acyltransferase 2 [Source:HGNC Symbol;Acc:23251] | |
| AXIN1 | Axin 1 | √ |
| AXL | AXL receptor tyrosine kinase [Source:HGNC Symbol;Acc:905] | |
| AZIN1 | Antizyme inhibitor 1 [Source:HGNC Symbol;Acc:16432] | |
| B3GALNT1 | Beta-1,3-N-acetylgalactosaminyltransferase 1 (globoside blood group) [Source:HGNC Symbol;Acc:918] | |

| | | |
|-----------------|---|--|
| B3GALNT2 | Beta-1,3-N-acetylgalactosaminyltransferase 2 [Source:HGNC Symbol;Acc:28596] | |
| B3GALT2 | UDP-Gal:betaglcnac beta 1,3-galactosyltransferase, polypeptide 2 [Source:HGNC Symbol;Acc:917] | |
| B3GALT5 | UDP-Gal:betaglcnac beta 1,3-galactosyltransferase, polypeptide 5 [Source:HGNC Symbol;Acc:920] | |
| B3GNT4 | UDP-glcnac:betagal beta-1,3-N-acetylglucosaminyltransferase 4 [Source:HGNC Symbol;Acc:15683] | |
| B3GNT5 | UDP-glcnac:betagal beta-1,3-N-acetylglucosaminyltransferase 5 [Source:HGNC Symbol;Acc:15684] | |
| B3GNTL1 | UDP-glcnac:betagal beta-1,3-N-acetylglucosaminyltransferase-like 1 [Source:HGNC Symbol;Acc:21727] | |
| B4GALT1 | UDP-Gal:betaglcnac beta 1,4- galactosyltransferase, polypeptide 1 [Source:HGNC Symbol;Acc:924] | |
| B4GALT3 | UDP-Gal:betaglcnac beta 1,4- galactosyltransferase, polypeptide 3 [Source:HGNC Symbol;Acc:926] | |
| B4GALT5 | UDP-Gal:betaglcnac beta 1,4- galactosyltransferase, polypeptide 5 [Source:HGNC Symbol;Acc:928] | |
| B4GALT6 | UDP-Gal:betaglcnac beta 1,4- galactosyltransferase, polypeptide 6 [Source:HGNC Symbol;Acc:929] | |
| B4GALT7 | Xylosylprotein beta 1,4-galactosyltransferase, polypeptide 7 (galactosyltransferase I) [Source:HGNC Symbol;Acc:930] | |
| B9D2 | B9 protein domain 2 [Source:HGNC Symbol;Acc:28636] | |
| BACH1 | BTB and CNC homology 1, basic leucine zipper transcription factor 1 [Source:HGNC Symbol;Acc:935] | |
| BACH2 | BTB and CNC homology 1, basic leucine zipper transcription factor 2 [Source:HGNC Symbol;Acc:14078] | |
| BAHD1 | Bromo adjacent homology domain containing 1 [Source:HGNC Symbol;Acc:29153] | |
| BAI2 | Brain-specific angiogenesis inhibitor 2 [Source:HGNC Symbol;Acc:944] | |
| BAI3 | Brain-specific angiogenesis inhibitor 3 [Source:HGNC Symbol;Acc:945] | |
| BAIAP2 | BAI1-associated protein 2 [Source:HGNC Symbol;Acc:947] | |
| BAK1 | BCL2-antagonist/killer 1 [Source:HGNC Symbol;Acc:949] | |

| | | |
|----------------|--|---|
| BANF1 | Barrier to autointegration factor 1 [Source:HGNC Symbol;Acc:17397] | |
| BAP1 | BRCA1 associated protein-1 (ubiquitin carboxy-terminal hydrolase) | √ |
| BARD1 | BRCA1 associated RING domain 1 [Source:HGNC Symbol;Acc:952] | |
| BARHL2 | Barh-like homeobox 2 [Source:HGNC Symbol;Acc:954] | |
| BAZ1B | Bromodomain adjacent to zinc finger domain, 1B [Source:HGNC Symbol;Acc:961] | |
| BAZ2A | Bromodomain adjacent to zinc finger domain, 2A [Source:HGNC Symbol;Acc:962] | |
| BAZ2B | Bromodomain adjacent to zinc finger domain, 2B [Source:HGNC Symbol;Acc:963] | |
| BBOX1 | Butyrobetaine (gamma), 2-oxoglutarate dioxygenase (gamma-butyrobetaine hydroxylase) 1 [Source:HGNC Symbol;Acc:964] | |
| BBS1 | Bardet-Biedl syndrome 1 [Source:HGNC Symbol;Acc:966] | |
| BBS10 | Bardet-Biedl syndrome 10 [Source:HGNC Symbol;Acc:26291] | |
| BBS12 | Bardet-Biedl syndrome 12 [Source:HGNC Symbol;Acc:26648] | |
| BBS5 | Bardet-Biedl syndrome 5 [Source:HGNC Symbol;Acc:970] | |
| BBX | Bobby sox homolog (Drosophila) [Source:HGNC Symbol;Acc:14422] | |
| BCAN | Brevican [Source:HGNC Symbol;Acc:23059] | |
| BCAP29 | B-cell receptor-associated protein 29 [Source:HGNC Symbol;Acc:24131] | |
| BCAR1 | Breast cancer anti-estrogen resistance 1 [Source:HGNC Symbol;Acc:971] | |
| BCAS1 | Breast carcinoma amplified sequence 1 [Source:HGNC Symbol;Acc:974] | |
| BCAS3 | Breast carcinoma amplified sequence 3 [Source:HGNC Symbol;Acc:14347] | |
| BCAT1 | Branched chain amino-acid transaminase 1, cytosolic [Source:HGNC Symbol;Acc:976] | |
| BCKDHB | Branched chain keto acid dehydrogenase E1, beta polypeptide [Source:HGNC Symbol;Acc:987] | |
| BCKDK | Branched chain ketoacid dehydrogenase kinase [Source:HGNC Symbol;Acc:16902] | |
| BCL11A | B-cell CLL/lymphoma 11A (zinc finger protein) | √ |
| BCL11B | B-cell CLL/lymphoma 11B (zinc finger protein) | √ |
| BCL2L1 | BCL2-like 1 [Source:HGNC Symbol;Acc:992] | |
| BCL2L11 | BCL2-like 11 (apoptosis facilitator) [Source:HGNC Symbol;Acc:994] | |
| BCL2L12 | BCL2-like 12 (proline rich) [Source:HGNC Symbol;Acc:13787] | |

| | | |
|---------------|---|---|
| BCL2L2 | BCL2-like 2 [Source:HGNC Symbol;Acc:995] | |
| BCL3 | B-cell CLL/lymphoma 3 [Source:HGNC Symbol;Acc:998] | √ |
| BCL6 | B-cell CLL/lymphoma 6 [Source:HGNC Symbol;Acc:1001] | √ |
| BCL6B | B-cell CLL/lymphoma 6, member B [Source:HGNC Symbol;Acc:1002] | |
| BCL9L | B-cell CLL/lymphoma 9-like [Source:HGNC Symbol;Acc:23688] | |
| BCOR | BCL6 corepressor [Source:HGNC Symbol;Acc:20893] | √ |
| BCR | Breakpoint cluster region | √ |
| BCS1L | BCS1-like (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:1020] | |
| BDP1 | B double prime 1, subunit of RNA polymerase III transcription initiation factor IIIB [Source:HGNC Symbol;Acc:13652] | |
| BEND2 | BEN domain containing 2 [Source:HGNC Symbol;Acc:28509] | |
| BEND3 | BEN domain containing 3 [Source:HGNC Symbol;Acc:23040] | |
| BEND4 | BEN domain containing 4 [Source:HGNC Symbol;Acc:23815] | |
| BEND5 | BEN domain containing 5 [Source:HGNC Symbol;Acc:25668] | |
| BEST2 | Bestrophin 2 [Source:HGNC Symbol;Acc:17107] | |
| BEST3 | Bestrophin 3 [Source:HGNC Symbol;Acc:17105] | |
| BEX2 | Brain expressed X-linked 2 [Source:HGNC Symbol;Acc:30933] | |
| BFAR | Bifunctional apoptosis regulator [Source:HGNC Symbol;Acc:17613] | |
| BFSP2 | Beaded filament structural protein 2, phakinin [Source:HGNC Symbol;Acc:1041] | |
| BHLHB9 | Basic helix-loop-helix domain containing, class B, 9 [Source:HGNC Symbol;Acc:29353] | |
| BICC1 | Bicaudal C homolog 1 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:19351] | |
| BICD2 | Bicaudal D homolog 2 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:17208] | |
| BIN1 | Bridging integrator 1 [Source:HGNC Symbol;Acc:1052] | |
| BIRC6 | Baculoviral IAP repeat containing 6 [Source:HGNC Symbol;Acc:13516] | |
| BIRC7 | Baculoviral IAP repeat containing 7 [Source:HGNC Symbol;Acc:13702] | |
| BLM | Bloom syndrome, recq helicase-like | √ |
| BLMH | Bleomycin hydrolase [Source:HGNC Symbol;Acc:1059] | |
| BLVRB | Biliverdin reductase B (flavin reductase (NADPH)) [Source:HGNC Symbol;Acc:1063] | |
| BMP1 | Bone morphogenetic protein 1 [Source:HGNC Symbol;Acc:1067] | |
| BMP7 | Bone morphogenetic protein 7 [Source:HGNC Symbol;Acc:1074] | |

| | | |
|---------------|---|---|
| BMP8B | Bone morphogenetic protein 8b [Source:HGNC Symbol;Acc:1075] | |
| BMPER | BMP binding endothelial regulator [Source:HGNC Symbol;Acc:24154] | |
| BMPR1A | Bone morphogenetic protein receptor, type IA | √ |
| BMPR2 | Bone morphogenetic protein receptor, type II (serine/threonine kinase) [Source:HGNC Symbol;Acc:1078] | |
| BMS1 | BMS1 homolog, ribosome assembly protein (yeast) [Source:HGNC Symbol;Acc:23505] | |
| BMX | BMX non-receptor tyrosine kinase [Source:HGNC Symbol;Acc:1079] | |
| BNC2 | Basonuclin 2 [Source:HGNC Symbol;Acc:30988] | |
| BNIP1 | BCL2/adenovirus E1B 19kda interacting protein 1 [Source:HGNC Symbol;Acc:1082] | |
| BNIP2 | BCL2/adenovirus E1B 19kda interacting protein 2 [Source:HGNC Symbol;Acc:1083] | |
| BNIPL | BCL2/adenovirus E1B 19kd interacting protein like [Source:HGNC Symbol;Acc:16976] | |
| BOK | BCL2-related ovarian killer [Source:HGNC Symbol;Acc:1087] | |
| BOLA2 | Bola homolog 2 (E. Coli) [Source:HGNC Symbol;Acc:29488] | |
| BOLA2B | Bola homolog 2B (E. Coli) [Source:HGNC Symbol;Acc:32479] | |
| BOLL | Bol, boule-like (Drosophila) [Source:HGNC Symbol;Acc:14273] | |
| BOP1 | Block of proliferation 1 [Source:HGNC Symbol;Acc:15519] | |
| BPNT1 | 3'(2'), 5'-bisphosphate nucleotidase 1 [Source:HGNC Symbol;Acc:1096] | |
| BPTF | Bromodomain PHD finger transcription factor [Source:HGNC Symbol;Acc:3581] | |
| BRAF | V-raf murine sarcoma viral oncogene homolog B1 | √ |
| BRAP | BRCA1 associated protein [Source:HGNC Symbol;Acc:1099] | |
| BRCA1 | Breast cancer 1, early onset | √ |
| BRCA2 | Breast cancer 2, early onset [Source:HGNC Symbol;Acc:1101] | |
| BRD1 | Bromodomain containing 1 [Source:HGNC Symbol;Acc:1102] | |
| BRD4 | Bromodomain containing 4 | √ |
| BRD7 | Bromodomain containing 7 [Source:HGNC Symbol;Acc:14310] | |
| BRD8 | Bromodomain containing 8 [Source:HGNC Symbol;Acc:19874] | |
| BRF1 | BRF1 homolog, subunit of RNA polymerase III transcription initiation factor IIIB (S. Cerevisiae) [Source:HGNC Symbol;Acc:11551] | |

| | | |
|---------------|--|---|
| BRPF1 | Bromodomain and PHD finger containing, 1 [Source:HGNC Symbol;Acc:14255] | |
| BRS3 | Bombesin-like receptor 3 [Source:HGNC Symbol;Acc:1113] | |
| BRWD1 | Bromodomain and WD repeat domain containing 1 [Source:HGNC Symbol;Acc:12760] | |
| BRWD3 | Bromodomain and WD repeat domain containing 3 [Source:HGNC Symbol;Acc:17342] | |
| BSCL2 | Berardinelli-Seip congenital lipodystrophy 2 (seipin) [Source:HGNC Symbol;Acc:15832] | |
| BSDC1 | BSD domain containing 1 [Source:HGNC Symbol;Acc:25501] | |
| BSG | Basigin (Ok blood group) [Source:HGNC Symbol;Acc:1116] | |
| BSN | Bassoon (presynaptic cytomatrix protein) [Source:HGNC Symbol;Acc:1117] | |
| BSPRY | B-box and SPRY domain containing [Source:HGNC Symbol;Acc:18232] | |
| BTA1F1 | BTA1F1 RNA polymerase II, B-TFIID transcription factor-associated, 170kda (Mot1 homolog, <i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:17307] | |
| BTBD10 | BTB (POZ) domain containing 10 [Source:HGNC Symbol;Acc:21445] | |
| BTBD11 | BTB (POZ) domain containing 11 [Source:HGNC Symbol;Acc:23844] | |
| BTBD3 | BTB (POZ) domain containing 3 [Source:HGNC Symbol;Acc:15854] | |
| BTBD6 | BTB (POZ) domain containing 6 [Source:HGNC Symbol;Acc:19897] | |
| BTBD7 | BTB (POZ) domain containing 7 [Source:HGNC Symbol;Acc:18269] | |
| BTBD8 | BTB (POZ) domain containing 8 [Source:HGNC Symbol;Acc:21019] | |
| BTBD9 | BTB (POZ) domain containing 9 [Source:HGNC Symbol;Acc:21228] | |
| BTDD | Biotinidase [Source:HGNC Symbol;Acc:1122] | |
| BTG1 | B-cell translocation gene 1, anti-proliferative | √ |
| BTN3A1 | Butyrophilin, subfamily 3, member A1 [Source:HGNC Symbol;Acc:1138] | |
| BTN3A2 | Butyrophilin, subfamily 3, member A2 [Source:HGNC Symbol;Acc:1139] | |
| BTN3A3 | Butyrophilin, subfamily 3, member A3 [Source:HGNC Symbol;Acc:1140] | |
| BTNL8 | Butyrophilin-like 8 [Source:HGNC Symbol;Acc:26131] | |
| BTRC | Beta-transducin repeat containing [Source:HGNC Symbol;Acc:1144] | |
| BUB1B | Budding uninhibited by benzimidazoles 1 homolog beta (yeast) [Source:HGNC Symbol;Acc:1149] | √ |

| | | |
|------------------|---|--|
| BUB3 | Budding uninhibited by benzimidazoles 3 homolog (yeast) [Source:HGNC Symbol;Acc:1151] | |
| BVES | Blood vessel epicardial substance [Source:HGNC Symbol;Acc:1152] | |
| BZW1 | Basic leucine zipper and W2 domains 1 [Source:HGNC Symbol;Acc:18380] | |
| C10orf108 | Chromosome 10 open reading frame 108 [Source:HGNC Symbol;Acc:30724] | |
| C10orf113 | Chromosome 10 open reading frame 113 [Source:HGNC Symbol;Acc:31447] | |
| C10orf116 | Chromosome 10 open reading frame 116 [Source:HGNC Symbol;Acc:24043] | |
| C10orf128 | Chromosome 10 open reading frame 128 [Source:HGNC Symbol;Acc:27274] | |
| C10orf136 | Chromosome 10 open reading frame 136 [Source:HGNC Symbol;Acc:31657] | |
| C10orf18 | Chromosome 10 open reading frame 18 [Source:HGNC Symbol;Acc:23484] | |
| C10orf25 | Chromosome 10 open reading frame 25 [Source:HGNC Symbol;Acc:23509] | |
| C10orf28 | Chromosome 10 open reading frame 28 [Source:HGNC Symbol;Acc:23512] | |
| C10orf58 | Chromosome 10 open reading frame 58 [Source:HGNC Symbol;Acc:28651] | |
| C10orf67 | Chromosome 10 open reading frame 67 [Source:HGNC Symbol;Acc:28716] | |
| C10orf88 | Chromosome 10 open reading frame 88 [Source:HGNC Symbol;Acc:25822] | |
| C10orf90 | Chromosome 10 open reading frame 90 [Source:HGNC Symbol;Acc:26563] | |
| C10orf95 | Chromosome 10 open reading frame 95 [Source:HGNC Symbol;Acc:25880] | |
| C10orf99 | Chromosome 10 open reading frame 99 [Source:HGNC Symbol;Acc:31428] | |

| | | |
|-----------------|--|--|
| C11orf30 | Chromosome 11 open reading frame 30 [Source:HGNC Symbol;Acc:18071] | |
| C11orf34 | Chromosome 11 open reading frame 34 [Source:HGNC Symbol;Acc:30053] | |
| C11orf36 | Chromosome 11 open reading frame 36 [Source:HGNC Symbol;Acc:26691] | |
| C11orf39 | Chromosome 11 open reading frame 39 [Source:HGNC Symbol;Acc:32293] | |
| C11orf41 | Chromosome 11 open reading frame 41 [Source:HGNC Symbol;Acc:24836] | |
| C11orf44 | Chromosome 11 open reading frame 44 [Source:HGNC Symbol;Acc:26805] | |
| C11orf46 | Chromosome 11 open reading frame 46 [Source:HGNC Symbol;Acc:26798] | |
| C11orf61 | Chromosome 11 open reading frame 61 [Source:HGNC Symbol;Acc:26266] | |
| C11orf68 | Chromosome 11 open reading frame 68 [Source:HGNC Symbol;Acc:28801] | |
| C11orf72 | Chromosome 11 open reading frame 72 [Source:HGNC Symbol;Acc:26915] | |
| C11orf82 | Chromosome 11 open reading frame 82 [Source:HGNC Symbol;Acc:26351] | |
| C11orf87 | Chromosome 11 open reading frame 87 [Source:HGNC Symbol;Acc:33788] | |
| C11orf9 | Chromosome 11 open reading frame 9 [Source:HGNC Symbol;Acc:1181] | |
| C11orf90 | Chromosome 11 open reading frame 90 [Source:HGNC Symbol;Acc:34443] | |
| C12orf24 | Chromosome 12 open reading frame 24 [Source:HGNC Symbol;Acc:30180] | |
| C12orf29 | Chromosome 12 open reading frame 29 [Source:HGNC Symbol;Acc:25322] | |
| C12orf35 | Chromosome 12 open reading frame 35 [Source:HGNC Symbol;Acc:25559] | |

| | | |
|------------------|---|--|
| C12orf41 | Chromosome 12 open reading frame 41 [Source:HGNC Symbol;Acc:26024] | |
| C12orf50 | Chromosome 12 open reading frame 50 [Source:HGNC Symbol;Acc:26665] | |
| C12orf51 | Chromosome 12 open reading frame 51 [Source:HGNC Symbol;Acc:26611] | |
| C12orf53 | Chromosome 12 open reading frame 53 [Source:HGNC Symbol;Acc:25338] | |
| C12orf63 | Chromosome 12 open reading frame 63 [Source:HGNC Symbol;Acc:24777] | |
| C12orf68 | Chromosome 12 open reading frame 68 [Source:HGNC Symbol;Acc:33749] | |
| C12orf76 | Chromosome 12 open reading frame 76 [Source:HGNC Symbol;Acc:33790] | |
| C13orf23 | Chromosome 13 open reading frame 23 [Source:HGNC Symbol;Acc:20291] | |
| C13orf27 | Chromosome 13 open reading frame 27 [Source:HGNC Symbol;Acc:25188] | |
| C13orf28 | Chromosome 13 open reading frame 28 [Source:HGNC Symbol;Acc:29575] | |
| C13orf30 | Chromosome 13 open reading frame 30 [Source:HGNC Symbol;Acc:26883] | |
| C13orf34 | Chromosome 13 open reading frame 34 [Source:HGNC Symbol;Acc:24724] | |
| C13orf36 | Chromosome 13 open reading frame 36 [Source:HGNC Symbol;Acc:33792] | |
| C13orf40 | Chromosome 13 open reading frame 40 [Source:HGNC Symbol;Acc:26851] | |
| C14orf102 | Chromosome 14 open reading frame 102 [Source:HGNC Symbol;Acc:20186] | |
| C14orf129 | Chromosome 14 open reading frame 129 [Source:HGNC Symbol;Acc:20343] | |

| | | |
|------------------|---|---|
| C14orf135 | Chromosome 14 open reading frame 135 [Source:HGNC Symbol;Acc:20349] | |
| C14orf144 | Chromosome 14 open reading frame 144 [Source:HGNC Symbol;Acc:20358] | |
| C14orf162 | Chromosome 14 open reading frame 162 [Source:HGNC Symbol;Acc:23243] | |
| C14orf167 | Chromosome 14 open reading frame 167 [Source:HGNC Symbol;Acc:23175] | |
| C14orf177 | Chromosome 14 open reading frame 177 [Source:HGNC Symbol;Acc:26375] | |
| C14orf21 | Chromosome 14 open reading frame 21 [Source:HGNC Symbol;Acc:19826] | |
| C14orf37 | Chromosome 14 open reading frame 37 [Source:HGNC Symbol;Acc:19846] | |
| C14orf43 | Chromosome 14 open reading frame 43 [Source:HGNC Symbol;Acc:19853] | |
| C14orf57 | Chromosome 14 open reading frame 57 [Source:HGNC Symbol;Acc:20104] | |
| C15orf17 | Chromosome 15 open reading frame 17 [Source:HGNC Symbol;Acc:24695] | |
| C15orf39 | Chromosome 15 open reading frame 39 [Source:HGNC Symbol;Acc:24497] | |
| C15orf41 | Chromosome 15 open reading frame 41 [Source:HGNC Symbol;Acc:26929] | |
| C15orf42 | Chromosome 15 open reading frame 42 [Source:HGNC Symbol;Acc:28704] | |
| C15orf53 | Chromosome 15 open reading frame 53 [Source:HGNC Symbol;Acc:33796] | |
| C15orf55 | Chromosome 15 open reading frame 55 | √ |
| C15orf56 | Chromosome 15 open reading frame 56 [Source:HGNC Symbol;Acc:33868] | |
| C16orf46 | Chromosome 16 open reading frame 46 [Source:HGNC Symbol;Acc:26525] | |

| | | |
|------------------|---|--|
| C16orf58 | Chromosome 16 open reading frame 58 [Source:HGNC Symbol;Acc:25848] | |
| C16orf70 | Chromosome 16 open reading frame 70 [Source:HGNC Symbol;Acc:29564] | |
| C16orf85 | Chromosome 16 open reading frame 85 [Source:HGNC Symbol;Acc:33799] | |
| C16orf86 | Chromosome 16 open reading frame 86 [Source:HGNC Symbol;Acc:33755] | |
| C17orf104 | Chromosome 17 open reading frame 104 [Source:HGNC Symbol;Acc:26670] | |
| C17orf28 | Chromosome 17 open reading frame 28 [Source:HGNC Symbol;Acc:15736] | |
| C17orf39 | Chromosome 17 open reading frame 39 [Source:HGNC Symbol;Acc:28453] | |
| C17orf42 | Chromosome 17 open reading frame 42 [Source:HGNC Symbol;Acc:26223] | |
| C17orf51 | Chromosome 17 open reading frame 51 [Source:HGNC Symbol;Acc:27904] | |
| C17orf53 | Chromosome 17 open reading frame 53 [Source:HGNC Symbol;Acc:28460] | |
| C17orf57 | Chromosome 17 open reading frame 57 [Source:HGNC Symbol;Acc:26864] | |
| C17orf59 | Chromosome 17 open reading frame 59 [Source:HGNC Symbol;Acc:25939] | |
| C17orf63 | Chromosome 17 open reading frame 63 [Source:HGNC Symbol;Acc:25563] | |
| C17orf70 | Chromosome 17 open reading frame 70 [Source:HGNC Symbol;Acc:26171] | |
| C17orf72 | Chromosome 17 open reading frame 72 [Source:HGNC Symbol;Acc:25673] | |
| C17orf85 | Chromosome 17 open reading frame 85 [Source:HGNC Symbol;Acc:24612] | |
| C18orf1 | Chromosome 18 open reading frame 1 [Source:HGNC Symbol;Acc:1224] | |

| | | |
|-----------------|--|--|
| C18orf19 | Chromosome 18 open reading frame 19 [Source:HGNC Symbol;Acc:28346] | |
| C18orf34 | Chromosome 18 open reading frame 34 [Source:HGNC Symbol;Acc:29588] | |
| C18orf45 | Chromosome 18 open reading frame 45 [Source:HGNC Symbol;Acc:31723] | |
| C19orf18 | Chromosome 19 open reading frame 18 [Source:HGNC Symbol;Acc:28642] | |
| C19orf25 | Chromosome 19 open reading frame 25 [Source:HGNC Symbol;Acc:26711] | |
| C19orf28 | Chromosome 19 open reading frame 28 [Source:HGNC Symbol;Acc:28299] | |
| C19orf29 | Chromosome 19 open reading frame 29 [Source:HGNC Symbol;Acc:29938] | |
| C19orf38 | Chromosome 19 open reading frame 38 [Source:HGNC Symbol;Acc:34073] | |
| C19orf44 | Chromosome 19 open reading frame 44 [Source:HGNC Symbol;Acc:26141] | |
| C19orf47 | Chromosome 19 open reading frame 47 [Source:HGNC Symbol;Acc:26723] | |
| C19orf51 | Chromosome 19 open reading frame 51 [Source:HGNC Symbol;Acc:30492] | |
| C19orf54 | Chromosome 19 open reading frame 54 [Source:HGNC Symbol;Acc:24758] | |
| C19orf59 | Chromosome 19 open reading frame 59 [Source:HGNC Symbol;Acc:27291] | |
| C19orf63 | Chromosome 19 open reading frame 63 [Source:HGNC Symbol;Acc:27609] | |
| C19orf75 | Chromosome 19 open reading frame 75 [Source:HGNC Symbol;Acc:26856] | |
| C1D | C1D nuclear receptor corepressor [Source:HGNC Symbol;Acc:29911] | |
| C1GALT1 | Core 1 synthase, glycoprotein-N-acetylgalactosamine 3-beta-galactosyltransferase, 1 [Source:HGNC Symbol;Acc:24337] | |

| | | |
|-----------------|--|--|
| C1orf115 | Chromosome 1 open reading frame 115 [Source:HGNC Symbol;Acc:25873] | |
| C1orf116 | Chromosome 1 open reading frame 116 [Source:HGNC Symbol;Acc:28667] | |
| C1orf129 | Chromosome 1 open reading frame 129 [Source:HGNC Symbol;Acc:26287] | |
| C1orf131 | Chromosome 1 open reading frame 131 [Source:HGNC Symbol;Acc:25332] | |
| C1orf132 | Chromosome 1 open reading frame 132 [Source:HGNC Symbol;Acc:32018] | |
| C1orf135 | Chromosome 1 open reading frame 135 [Source:HGNC Symbol;Acc:28363] | |
| C1orf158 | Chromosome 1 open reading frame 158 [Source:HGNC Symbol;Acc:28567] | |
| C1orf167 | Chromosome 1 open reading frame 167 [Source:HGNC Symbol;Acc:25262] | |
| C1orf168 | Chromosome 1 open reading frame 168 [Source:HGNC Symbol;Acc:27295] | |
| C1orf170 | Chromosome 1 open reading frame 170 [Source:HGNC Symbol;Acc:28208] | |
| C1orf183 | Chromosome 1 open reading frame 183 [Source:HGNC Symbol;Acc:28045] | |
| C1orf185 | Chromosome 1 open reading frame 185 [Source:HGNC Symbol;Acc:28096] | |
| C1orf187 | Chromosome 1 open reading frame 187 [Source:HGNC Symbol;Acc:25054] | |
| C1orf190 | Chromosome 1 open reading frame 190 [Source:HGNC Symbol;Acc:32327] | |
| C1orf21 | Chromosome 1 open reading frame 21 [Source:HGNC Symbol;Acc:15494] | |
| C1orf216 | Chromosome 1 open reading frame 216 [Source:HGNC Symbol;Acc:26800] | |
| C1orf222 | Chromosome 1 open reading frame 222 [Source:HGNC Symbol;Acc:27917] | |

| | | |
|------------------|--|--|
| C1orf226 | Chromosome 1 open reading frame 226 [Source:HGNC Symbol;Acc:34351] | |
| C1orf49 | Chromosome 1 open reading frame 49 [Source:HGNC Symbol;Acc:25366] | |
| C1orf53 | Chromosome 1 open reading frame 53 [Source:HGNC Symbol;Acc:30003] | |
| C1orf54 | Chromosome 1 open reading frame 54 [Source:HGNC Symbol;Acc:26258] | |
| C1orf55 | Chromosome 1 open reading frame 55 [Source:HGNC Symbol;Acc:26643] | |
| C1orf68 | Chromosome 1 open reading frame 68 [Source:HGNC Symbol;Acc:29468] | |
| C1orf69 | Chromosome 1 open reading frame 69 [Source:HGNC Symbol;Acc:27302] | |
| C1orf74 | Chromosome 1 open reading frame 74 [Source:HGNC Symbol;Acc:26319] | |
| C1orf77 | Chromosome 1 open reading frame 77 [Source:HGNC Symbol;Acc:24511] | |
| C1orf86 | Chromosome 1 open reading frame 86 [Source:HGNC Symbol;Acc:26428] | |
| C1orf88 | Chromosome 1 open reading frame 88 [Source:HGNC Symbol;Acc:27009] | |
| C1orf95 | Chromosome 1 open reading frame 95 [Source:HGNC Symbol;Acc:30491] | |
| C1QBP | Complement component 1, q subcomponent binding protein [Source:HGNC Symbol;Acc:1243] | |
| C1QTNF6 | C1q and tumor necrosis factor related protein 6 [Source:HGNC Symbol;Acc:14343] | |
| C20orf106 | Chromosome 20 open reading frame 106 [Source:HGNC Symbol;Acc:16100] | |
| C20orf107 | Chromosome 20 open reading frame 107 [Source:HGNC Symbol;Acc:16101] | |
| C20orf11 | Chromosome 20 open reading frame 11 [Source:HGNC Symbol;Acc:15857] | |
| C20orf111 | Chromosome 20 open reading frame 111 [Source:HGNC Symbol;Acc:16105] | |
| C20orf12 | Chromosome 20 open reading frame 12 [Source:HGNC Symbol;Acc:15858] | |
| C20orf152 | Chromosome 20 open reading frame 152 [Source:HGNC Symbol;Acc:16145] | |
| C20orf181 | Chromosome 20 open reading frame 181 [Source:HGNC Symbol;Acc:16174] | |
| C20orf185 | Chromosome 20 open reading frame 185 [Source:HGNC Symbol;Acc:16178] | |

| | | |
|------------------|---|--|
| C20orf194 | Chromosome 20 open reading frame 194 [Source:HGNC Symbol;Acc:17721] | |
| C20orf29 | Chromosome 20 open reading frame 29 [Source:HGNC Symbol;Acc:15875] | |
| C20orf4 | Chromosome 20 open reading frame 4 [Source:HGNC Symbol;Acc:15886] | |
| C20orf71 | Chromosome 20 open reading frame 71 [Source:HGNC Symbol;Acc:16204] | |
| C21orf2 | Chromosome 21 open reading frame 2 [Source:HGNC Symbol;Acc:1260] | |
| C21orf33 | Chromosome 21 open reading frame 33 [Source:HGNC Symbol;Acc:1273] | |
| C21orf37 | Chromosome 21 open reading frame 37 [Source:HGNC Symbol;Acc:1277] | |
| C21orf58 | Chromosome 21 open reading frame 58 [Source:HGNC Symbol;Acc:1300] | |
| C21orf59 | Chromosome 21 open reading frame 59 [Source:HGNC Symbol;Acc:1301] | |
| C21orf62 | Chromosome 21 open reading frame 62 [Source:HGNC Symbol;Acc:1305] | |
| C21orf91 | Chromosome 21 open reading frame 91 [Source:HGNC Symbol;Acc:16459] | |
| C22orf23 | Chromosome 22 open reading frame 23 [Source:HGNC Symbol;Acc:18589] | |
| C22orf25 | Chromosome 22 open reading frame 25 [Source:HGNC Symbol;Acc:25439] | |
| C22orf26 | Chromosome 22 open reading frame 26 [Source:HGNC Symbol;Acc:25606] | |
| C22orf31 | Chromosome 22 open reading frame 31 [Source:HGNC Symbol;Acc:26931] | |
| C22orf34 | Chromosome 22 open reading frame 34 [Source:HGNC Symbol;Acc:28010] | |
| C22orf40 | Chromosome 22 open reading frame 40 [Source:HGNC Symbol;Acc:33710] | |
| C22orf46 | Chromosome 22 open reading frame 46 [Source:HGNC Symbol;Acc:26294] | |
| C2CD2 | C2 calcium-dependent domain containing 2 [Source:HGNC Symbol;Acc:1266] | |
| C2CD3 | C2 calcium-dependent domain containing 3 [Source:HGNC Symbol;Acc:24564] | |

| | | |
|----------------|---|---|
| C2CD4A | C2 calcium-dependent domain containing 4A [Source:HGNC Symbol;Acc:33627] | |
| C2orf15 | Chromosome 2 open reading frame 15 [Source:HGNC Symbol;Acc:28436] | |
| C2orf18 | Chromosome 2 open reading frame 18 [Source:HGNC Symbol;Acc:26055] | |
| C2orf24 | Chromosome 2 open reading frame 24 [Source:HGNC Symbol;Acc:25220] | |
| C2orf42 | Chromosome 2 open reading frame 42 [Source:HGNC Symbol;Acc:26056] | |
| C2orf43 | Chromosome 2 open reading frame 43 [Source:HGNC Symbol;Acc:26145] | |
| C2orf44 | Chromosome 2 open reading frame 44 | √ |
| C2orf48 | Chromosome 2 open reading frame 48 [Source:HGNC Symbol;Acc:26322] | |
| C2orf49 | Chromosome 2 open reading frame 49 [Source:HGNC Symbol;Acc:28772] | |
| C2orf55 | Chromosome 2 open reading frame 55 [Source:HGNC Symbol;Acc:33454] | |
| C2orf57 | Chromosome 2 open reading frame 57 [Source:HGNC Symbol;Acc:28563] | |
| C2orf63 | Chromosome 2 open reading frame 63 [Source:HGNC Symbol;Acc:26453] | |
| C2orf69 | Chromosome 2 open reading frame 69 [Source:HGNC Symbol;Acc:26799] | |
| C2orf82 | Chromosome 2 open reading frame 82 [Source:HGNC Symbol;Acc:33763] | |
| C2orf89 | Chromosome 2 open reading frame 89 [Source:HGNC Symbol;Acc:27013] | |
| C3 | Complement component 3 [Source:HGNC Symbol;Acc:1318] | |
| C3orf10 | Chromosome 3 open reading frame 10 [Source:HGNC Symbol;Acc:23057] | |
| C3orf14 | Chromosome 3 open reading frame 14 [Source:HGNC Symbol;Acc:25024] | |
| C3orf17 | Chromosome 3 open reading frame 17 [Source:HGNC Symbol;Acc:24496] | |
| C3orf21 | Chromosome 3 open reading frame 21 [Source:HGNC Symbol;Acc:26639] | |
| C3orf26 | Chromosome 3 open reading frame 26 [Source:HGNC Symbol;Acc:28666] | |
| C3orf31 | Chromosome 3 open reading frame 31 [Source:HGNC Symbol;Acc:25187] | |
| C3orf35 | Chromosome 3 open reading frame 35 [Source:HGNC Symbol;Acc:24082] | |
| C3orf48 | Chromosome 3 open reading frame 48 [Source:HGNC Symbol;Acc:28406] | |
| C3orf57 | Chromosome 3 open reading frame 57 [Source:HGNC Symbol;Acc:24045] | |
| C3orf58 | Chromosome 3 open reading frame 58 [Source:HGNC Symbol;Acc:28490] | |
| C3orf67 | Chromosome 3 open reading frame 67 [Source:HGNC Symbol;Acc:24763] | |
| C3orf78 | Chromosome 3 open reading frame 78 [Source:HGNC Symbol;Acc:37257] | |
| C4A | Complement component 4A (Rodgers blood group) [Source:HGNC Symbol;Acc:1323] | |
| C4B | Complement component 4B (Chido blood group) [Source:HGNC Symbol;Acc:1324] | |

| | | |
|-----------------|---|--|
| C4BPA | Complement component 4 binding protein, alpha [Source:HGNC Symbol;Acc:1325] | |
| C4orf21 | Chromosome 4 open reading frame 21 [Source:HGNC Symbol;Acc:25654] | |
| C4orf31 | Chromosome 4 open reading frame 31 [Source:HGNC Symbol;Acc:26256] | |
| C4orf33 | Chromosome 4 open reading frame 33 [Source:HGNC Symbol;Acc:27025] | |
| C4orf36 | Chromosome 4 open reading frame 36 [Source:HGNC Symbol;Acc:28386] | |
| C4orf40 | Chromosome 4 open reading frame 40 [Source:HGNC Symbol;Acc:33193] | |
| C5AR1 | Complement component 5a receptor 1 [Source:HGNC Symbol;Acc:1338] | |
| C5orf13 | Chromosome 5 open reading frame 13 [Source:HGNC Symbol;Acc:16834] | |
| C5orf15 | Chromosome 5 open reading frame 15 [Source:HGNC Symbol;Acc:20656] | |
| C5orf17 | Chromosome 5 open reading frame 17 [Source:HGNC Symbol;Acc:26630] | |
| C5orf25 | Chromosome 5 open reading frame 25 [Source:HGNC Symbol;Acc:24779] | |
| C5orf28 | Chromosome 5 open reading frame 28 [Source:HGNC Symbol;Acc:26139] | |
| C5orf41 | Chromosome 5 open reading frame 41 [Source:HGNC Symbol;Acc:24050] | |
| C5orf42 | Chromosome 5 open reading frame 42 [Source:HGNC Symbol;Acc:25801] | |
| C5orf43 | Chromosome 5 open reading frame 43 [Source:HGNC Symbol;Acc:33861] | |
| C5orf45 | Chromosome 5 open reading frame 45 [Source:HGNC Symbol;Acc:30817] | |
| C5orf47 | Chromosome 5 open reading frame 47 [Source:HGNC Symbol;Acc:27026] | |
| C5orf51 | Chromosome 5 open reading frame 51 [Source:HGNC Symbol;Acc:27750] | |
| C5orf56 | Chromosome 5 open reading frame 56 [Source:HGNC Symbol;Acc:33838] | |
| C5orf58 | Chromosome 5 open reading frame 58 [Source:HGNC Symbol;Acc:37272] | |
| C5orf60 | Chromosome 5 open reading frame 60 [Source:HGNC Symbol;Acc:27753] | |
| C6orf106 | Chromosome 6 open reading frame 106 [Source:HGNC Symbol;Acc:21215] | |
| C6orf115 | Chromosome 6 open reading frame 115 [Source:HGNC Symbol;Acc:21230] | |
| C6orf118 | Chromosome 6 open reading frame 118 [Source:HGNC Symbol;Acc:21233] | |
| C6orf132 | Chromosome 6 open reading frame 132 [Source:HGNC Symbol;Acc:21288] | |
| C6orf141 | Chromosome 6 open reading frame 141 [Source:HGNC Symbol;Acc:21351] | |

| | | |
|-----------------|---|--|
| C6orf145 | Chromosome 6 open reading frame 145 [Source:HGNC Symbol;Acc:21361] | |
| C6orf164 | Chromosome 6 open reading frame 164 [Source:HGNC Symbol;Acc:21404] | |
| C6orf170 | Chromosome 6 open reading frame 170 [Source:HGNC Symbol;Acc:21485] | |
| C6orf174 | Chromosome 6 open reading frame 174 [Source:HGNC Symbol;Acc:21494] | |
| C6orf191 | Chromosome 6 open reading frame 191 [Source:HGNC Symbol;Acc:21571] | |
| C6orf192 | Chromosome 6 open reading frame 192 [Source:HGNC Symbol;Acc:21573] | |
| C6orf201 | Chromosome 6 open reading frame 201 [Source:HGNC Symbol;Acc:21620] | |
| C6orf204 | Chromosome 6 open reading frame 204 [Source:HGNC Symbol;Acc:21638] | |
| C6orf27 | Chromosome 6 open reading frame 27 [Source:HGNC Symbol;Acc:13939] | |
| C6orf35 | Chromosome 6 open reading frame 35 [Source:HGNC Symbol;Acc:17206] | |
| C6orf48 | Chromosome 6 open reading frame 48 [Source:HGNC Symbol;Acc:19078] | |
| C6orf64 | Chromosome 6 open reading frame 64 [Source:HGNC Symbol;Acc:21025] | |
| C6orf81 | Chromosome 6 open reading frame 81 [Source:HGNC Symbol;Acc:21099] | |
| C7 | Complement component 7 [Source:HGNC Symbol;Acc:1346] | |
| C7orf13 | Chromosome 7 open reading frame 13 [Source:HGNC Symbol;Acc:17126] | |
| C7orf16 | Chromosome 7 open reading frame 16 [Source:HGNC Symbol;Acc:16973] | |
| C7orf29 | Chromosome 7 open reading frame 29 [Source:HGNC Symbol;Acc:21720] | |
| C7orf52 | Chromosome 7 open reading frame 52 [Source:HGNC Symbol;Acc:22030] | |
| C7orf58 | Chromosome 7 open reading frame 58 [Source:HGNC Symbol;Acc:26159] | |
| C7orf63 | Chromosome 7 open reading frame 63 [Source:HGNC Symbol;Acc:26107] | |
| C7orf71 | Chromosome 7 open reading frame 71 [Source:HGNC Symbol;Acc:22364] | |
| C8A | Complement component 8, alpha polypeptide [Source:HGNC Symbol;Acc:1352] | |
| C8B | Complement component 8, beta polypeptide [Source:HGNC Symbol;Acc:1353] | |

| | | |
|-----------------|---|--|
| C8G | Complement component 8, gamma polypeptide [Source:HGNC Symbol;Acc:1354] | |
| C8orf12 | Chromosome 8 open reading frame 12 [Source:HGNC Symbol;Acc:15548] | |
| C8orf31 | Chromosome 8 open reading frame 31 [Source:HGNC Symbol;Acc:26731] | |
| C8orf37 | Chromosome 8 open reading frame 37 [Source:HGNC Symbol;Acc:27232] | |
| C8orf47 | Chromosome 8 open reading frame 47 [Source:HGNC Symbol;Acc:26823] | |
| C8orf55 | Chromosome 8 open reading frame 55 [Source:HGNC Symbol;Acc:29656] | |
| C8orf80 | Chromosome 8 open reading frame 80 [Source:HGNC Symbol;Acc:33550] | |
| C8orf82 | Chromosome 8 open reading frame 82 [Source:HGNC Symbol;Acc:33826] | |
| C9orf102 | Chromosome 9 open reading frame 102 [Source:HGNC Symbol;Acc:26922] | |
| C9orf114 | Chromosome 9 open reading frame 114 [Source:HGNC Symbol;Acc:26933] | |
| C9orf116 | Chromosome 9 open reading frame 116 [Source:HGNC Symbol;Acc:28435] | |
| C9orf117 | Chromosome 9 open reading frame 117 [Source:HGNC Symbol;Acc:27843] | |
| C9orf125 | Chromosome 9 open reading frame 125 [Source:HGNC Symbol;Acc:28180] | |
| C9orf140 | Chromosome 9 open reading frame 140 [Source:HGNC Symbol;Acc:28055] | |
| C9orf150 | Chromosome 9 open reading frame 150 [Source:HGNC Symbol;Acc:31452] | |
| C9orf156 | Chromosome 9 open reading frame 156 [Source:HGNC Symbol;Acc:30967] | |
| C9orf163 | Chromosome 9 open reading frame 163 [Source:HGNC Symbol;Acc:26718] | |
| C9orf167 | Chromosome 9 open reading frame 167 [Source:HGNC Symbol;Acc:25981] | |
| C9orf174 | Chromosome 9 open reading frame 174 [Source:HGNC Symbol;Acc:29303] | |
| C9orf25 | Chromosome 9 open reading frame 25 [Source:HGNC Symbol;Acc:19920] | |
| C9orf3 | Chromosome 9 open reading frame 3 [Source:HGNC Symbol;Acc:1361] | |

| | | |
|----------------|--|--|
| C9orf35 | Chromosome 9 open reading frame 35 [Source:HGNC Symbol;Acc:23388] | |
| C9orf38 | Chromosome 9 open reading frame 38 [Source:HGNC Symbol;Acc:23398] | |
| C9orf41 | Chromosome 9 open reading frame 41 [Source:HGNC Symbol;Acc:23435] | |
| C9orf47 | Chromosome 9 open reading frame 47 [Source:HGNC Symbol;Acc:23669] | |
| C9orf64 | Chromosome 9 open reading frame 64 [Source:HGNC Symbol;Acc:28144] | |
| C9orf68 | Chromosome 9 open reading frame 68 [Source:HGNC Symbol;Acc:25472] | |
| C9orf7 | Chromosome 9 open reading frame 7 [Source:HGNC Symbol;Acc:1365] | |
| C9orf71 | Chromosome 9 open reading frame 71 [Source:HGNC Symbol;Acc:28537] | |
| C9orf72 | Chromosome 9 open reading frame 72 [Source:HGNC Symbol;Acc:28337] | |
| C9orf84 | Chromosome 9 open reading frame 84 [Source:HGNC Symbol;Acc:26535] | |
| C9orf89 | Chromosome 9 open reading frame 89 [Source:HGNC Symbol;Acc:28148] | |
| C9orf93 | Chromosome 9 open reading frame 93 [Source:HGNC Symbol;Acc:29828] | |
| C9orf96 | Chromosome 9 open reading frame 96 [Source:HGNC Symbol;Acc:28669] | |
| CA12 | Carbonic anhydrase XII [Source:HGNC Symbol;Acc:1371] | |
| CA13 | Carbonic anhydrase XIII [Source:HGNC Symbol;Acc:14914] | |
| CA14 | Carbonic anhydrase XIV [Source:HGNC Symbol;Acc:1372] | |
| CA2 | Carbonic anhydrase II [Source:HGNC Symbol;Acc:1373] | |
| CA5B | Carbonic anhydrase VB, mitochondrial [Source:HGNC Symbol;Acc:1378] | |
| CA7 | Carbonic anhydrase VII [Source:HGNC Symbol;Acc:1381] | |
| CA8 | Carbonic anhydrase VIII [Source:HGNC Symbol;Acc:1382] | |
| CAB39 | Calcium binding protein 39 [Source:HGNC Symbol;Acc:20292] | |
| CABIN1 | Calcineurin binding protein 1 [Source:HGNC Symbol;Acc:24187] | |
| CABLES1 | Cdk5 and Abl enzyme substrate 1 [Source:HGNC Symbol;Acc:25097] | |
| CABP1 | Calcium binding protein 1 [Source:HGNC Symbol;Acc:1384] | |
| CABP4 | Calcium binding protein 4 [Source:HGNC Symbol;Acc:1386] | |
| CABP7 | Calcium binding protein 7 [Source:HGNC Symbol;Acc:20834] | |
| CABS1 | Calcium-binding protein, spermatid-specific 1 [Source:HGNC Symbol;Acc:30710] | |
| CACHD1 | Cache domain containing 1 [Source:HGNC Symbol;Acc:29314] | |
| CACNA1C | Calcium channel, voltage-dependent, L type, alpha 1C subunit [Source:HGNC Symbol;Acc:1390] | |
| CACNA1E | Calcium channel, voltage-dependent, R type, alpha 1E subunit [Source:HGNC Symbol;Acc:1392] | |

| | | |
|-----------------|--|--|
| CACNA1F | Calcium channel, voltage-dependent, L type, alpha 1F subunit [Source:HGNC Symbol;Acc:1393] | |
| CACNA1G | Calcium channel, voltage-dependent, T type, alpha 1G subunit [Source:HGNC Symbol;Acc:1394] | |
| CACNA1H | Calcium channel, voltage-dependent, T type, alpha 1H subunit [Source:HGNC Symbol;Acc:1395] | |
| CACNA1I | Calcium channel, voltage-dependent, T type, alpha 1I subunit [Source:HGNC Symbol;Acc:1396] | |
| CACNA1S | Calcium channel, voltage-dependent, L type, alpha 1S subunit [Source:HGNC Symbol;Acc:1397] | |
| CACNA2D2 | Calcium channel, voltage-dependent, alpha 2/delta subunit 2 [Source:HGNC Symbol;Acc:1400] | |
| CACNA2D3 | Calcium channel, voltage-dependent, alpha 2/delta subunit 3 [Source:HGNC Symbol;Acc:15460] | |
| CACNA2D4 | Calcium channel, voltage-dependent, alpha 2/delta subunit 4 [Source:HGNC Symbol;Acc:20202] | |
| CACNB2 | Calcium channel, voltage-dependent, beta 2 subunit [Source:HGNC Symbol;Acc:1402] | |
| CACNB3 | Calcium channel, voltage-dependent, beta 3 subunit [Source:HGNC Symbol;Acc:1403] | |
| CACNG1 | Calcium channel, voltage-dependent, gamma subunit 1 [Source:HGNC Symbol;Acc:1405] | |
| CACNG3 | Calcium channel, voltage-dependent, gamma subunit 3 [Source:HGNC Symbol;Acc:1407] | |
| CACNG8 | Calcium channel, voltage-dependent, gamma subunit 8 [Source:HGNC Symbol;Acc:13628] | |
| CAD | Carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase [Source:HGNC Symbol;Acc:1424] | |
| CADM1 | Cell adhesion molecule 1 [Source:HGNC Symbol;Acc:5951] | |
| CADM2 | Cell adhesion molecule 2 [Source:HGNC Symbol;Acc:29849] | |
| CAGE1 | Cancer antigen 1 [Source:HGNC Symbol;Acc:21622] | |
| CALB1 | Calbindin 1, 28kda [Source:HGNC Symbol;Acc:1434] | |
| CALCB | Calcitonin-related polypeptide beta [Source:HGNC Symbol;Acc:1438] | |

| | | |
|-----------------|---|---|
| CALCOCO2 | Calcium binding and coiled-coil domain 2 [Source:HGNC Symbol;Acc:29912] | |
| CALCRL | Calcitonin receptor-like [Source:HGNC Symbol;Acc:16709] | |
| CALD1 | Caldesmon 1 [Source:HGNC Symbol;Acc:1441] | |
| CALM1 | Calmodulin 1 (phosphorylase kinase, delta) [Source:HGNC Symbol;Acc:1442] | |
| CALML4 | Calmodulin-like 4 [Source:HGNC Symbol;Acc:18445] | |
| CALML6 | Calmodulin-like 6 [Source:HGNC Symbol;Acc:24193] | |
| CALN1 | Calneuron 1 [Source:HGNC Symbol;Acc:13248] | |
| CALU | Calumenin [Source:HGNC Symbol;Acc:1458] | |
| CAMK1D | Calcium/calmodulin-dependent protein kinase ID [Source:HGNC Symbol;Acc:19341] | |
| CAMK2D | Calcium/calmodulin-dependent protein kinase II delta [Source:HGNC Symbol;Acc:1462] | |
| CAMK2G | Calcium/calmodulin-dependent protein kinase II gamma [Source:HGNC Symbol;Acc:1463] | |
| CAMKK1 | Calcium/calmodulin-dependent protein kinase kinase 1, alpha [Source:HGNC Symbol;Acc:1469] | |
| CAMKV | Cam kinase-like vesicle-associated [Source:HGNC Symbol;Acc:28788] | |
| CAMSAP1 | Calmodulin regulated spectrin-associated protein 1 [Source:HGNC Symbol;Acc:19946] | |
| CAMTA1 | Calmodulin binding transcription activator 1 | √ |
| CAND1 | Cullin-associated and neddylation-dissociated 1 [Source:HGNC Symbol;Acc:30688] | |
| CAND2 | Cullin-associated and neddylation-dissociated 2 (putative) [Source:HGNC Symbol;Acc:30689] | |
| CAPN1 | Calpain 1, (mu/I) large subunit [Source:HGNC Symbol;Acc:1476] | |
| CAPN12 | Calpain 12 [Source:HGNC Symbol;Acc:13249] | |
| CAPN7 | Calpain 7 [Source:HGNC Symbol;Acc:1484] | |
| CAPRN2 | Caprin family member 2 [Source:HGNC Symbol;Acc:21259] | |
| CAPS | Calcyphosine [Source:HGNC Symbol;Acc:1487] | |
| CAPZA3 | Capping protein (actin filament) muscle Z-line, alpha 3 [Source:HGNC Symbol;Acc:24205] | |

| | | |
|-----------------|---|---|
| CARD11 | Caspase recruitment domain family, member 11 [Source:HGNC Symbol;Acc:16393] | √ |
| CARD14 | Caspase recruitment domain family, member 14 [Source:HGNC Symbol;Acc:16446] | |
| CARD8 | Caspase recruitment domain family, member 8 [Source:HGNC Symbol;Acc:17057] | |
| CARD9 | Caspase recruitment domain family, member 9 [Source:HGNC Symbol;Acc:16391] | |
| CARM1 | Coactivator-associated arginine methyltransferase 1 [Source:HGNC Symbol;Acc:23393] | |
| CARS | Cysteinyl-trna synthetase [Source:HGNC Symbol;Acc:1493] | √ |
| CASC4 | Cancer susceptibility candidate 4 [Source:HGNC Symbol;Acc:24892] | |
| CASC5 | Cancer susceptibility candidate 5 [Source:HGNC Symbol;Acc:24054] | |
| CASD1 | CAS1 domain containing 1 [Source:HGNC Symbol;Acc:16014] | |
| CASK | Calcium/calmodulin-dependent serine protein kinase (MAGUK family) [Source:HGNC Symbol;Acc:1497] | |
| CASKIN1 | CASK interacting protein 1 [Source:HGNC Symbol;Acc:20879] | |
| CASP1 | Caspase 1, apoptosis-related cysteine peptidase (interleukin 1, beta, convertase) [Source:HGNC Symbol;Acc:1499] | |
| CASP2 | Caspase 2, apoptosis-related cysteine peptidase [Source:HGNC Symbol;Acc:1503] | |
| CASP6 | Caspase 6, apoptosis-related cysteine peptidase [Source:HGNC Symbol;Acc:1507] | |
| CASP8AP2 | Caspase 8 associated protein 2 [Source:HGNC Symbol;Acc:1510] | |
| CASP9 | Caspase 9, apoptosis-related cysteine peptidase [Source:HGNC Symbol;Acc:1511] | |
| CASQ1 | Calsequestrin 1 (fast-twitch, skeletal muscle) [Source:HGNC Symbol;Acc:1512] | |
| CASQ2 | Calsequestrin 2 (cardiac muscle) [Source:HGNC Symbol;Acc:1513] | |
| CASR | Calcium-sensing receptor [Source:HGNC Symbol;Acc:1514] | |
| CASS4 | Cas scaffolding protein family member 4 [Source:HGNC Symbol;Acc:15878] | |
| CAST | Calpastatin [Source:HGNC Symbol;Acc:1515] | |

| | | |
|-----------------|--|---|
| CASZ1 | Castor zinc finger 1 [Source:HGNC Symbol;Acc:26002] | |
| CAT | Catalase [Source:HGNC Symbol;Acc:1516] | |
| CATSPERB | Cation channel, sperm-associated, beta [Source:HGNC Symbol;Acc:20500] | |
| CATSPERG | Cation channel, sperm-associated, gamma [Source:HGNC Symbol;Acc:25243] | |
| CAV2 | Caveolin 2 [Source:HGNC Symbol;Acc:1528] | |
| CBLB | Cas-Br-M (murine) ecotropic retroviral transforming sequence b | √ |
| CBR3 | Carbonyl reductase 3 [Source:HGNC Symbol;Acc:1549] | |
| CBWD3 | COBW domain containing 3 [Source:HGNC Symbol;Acc:18519] | |
| CBWD5 | COBW domain containing 5 [Source:HGNC Symbol;Acc:24584] | |
| CBWD6 | COBW domain containing 6 [Source:HGNC Symbol;Acc:31978] | |
| CBX3 | Chromobox homolog 3 [Source:HGNC Symbol;Acc:1553] | |
| CBX7 | Chromobox homolog 7 [Source:HGNC Symbol;Acc:1557] | |
| CC2D1A | Coiled-coil and C2 domain containing 1A [Source:HGNC Symbol;Acc:30237] | |
| CC2D1B | Coiled-coil and C2 domain containing 1B [Source:HGNC Symbol;Acc:29386] | |
| CCAR1 | Cell division cycle and apoptosis regulator 1 [Source:HGNC Symbol;Acc:24236] | |
| CCBL1 | Cysteine conjugate-beta lyase, cytoplasmic [Source:HGNC Symbol;Acc:1564] | |
| CCBL2 | Cysteine conjugate-beta lyase 2 [Source:HGNC Symbol;Acc:33238] | |
| CCDC103 | Coiled-coil domain containing 103 [Source:HGNC Symbol;Acc:32700] | |
| CCDC108 | Coiled-coil domain containing 108 [Source:HGNC Symbol;Acc:25325] | |
| CCDC11 | Coiled-coil domain containing 11 [Source:HGNC Symbol;Acc:26530] | |
| CCDC110 | Coiled-coil domain containing 110 [Source:HGNC Symbol;Acc:28504] | |
| CCDC112 | Coiled-coil domain containing 112 [Source:HGNC Symbol;Acc:28599] | |
| CCDC116 | Coiled-coil domain containing 116 [Source:HGNC Symbol;Acc:26688] | |
| CCDC126 | Coiled-coil domain containing 126 [Source:HGNC Symbol;Acc:22398] | |
| CCDC13 | Coiled-coil domain containing 13 [Source:HGNC Symbol;Acc:26358] | |
| CCDC130 | Coiled-coil domain containing 130 [Source:HGNC Symbol;Acc:28118] | |
| CCDC132 | Coiled-coil domain containing 132 [Source:HGNC Symbol;Acc:25956] | |
| CCDC135 | Coiled-coil domain containing 135 [Source:HGNC Symbol;Acc:25289] | |

| | | |
|----------------|--|--|
| CCDC138 | Coiled-coil domain containing 138 [Source:HGNC Symbol;Acc:26531] | |
| CCDC14 | Coiled-coil domain containing 14 [Source:HGNC Symbol;Acc:25766] | |
| CCDC142 | Coiled-coil domain containing 142 [Source:HGNC Symbol;Acc:25889] | |
| CCDC155 | Coiled-coil domain containing 155 [Source:HGNC Symbol;Acc:26520] | |
| CCDC18 | Coiled-coil domain containing 18 [Source:HGNC Symbol;Acc:30370] | |
| CCDC21 | Coiled-coil domain containing 21 [Source:HGNC Symbol;Acc:25309] | |
| CCDC24 | Coiled-coil domain containing 24 [Source:HGNC Symbol;Acc:28688] | |
| CCDC25 | Coiled-coil domain containing 25 [Source:HGNC Symbol;Acc:25591] | |
| CCDC28A | Coiled-coil domain containing 28A [Source:HGNC Symbol;Acc:21098] | |
| CCDC28B | Coiled-coil domain containing 28B [Source:HGNC Symbol;Acc:28163] | |
| CCDC3 | Coiled-coil domain containing 3 [Source:HGNC Symbol;Acc:23813] | |
| CCDC36 | Coiled-coil domain containing 36 [Source:HGNC Symbol;Acc:27945] | |
| CCDC42 | Coiled-coil domain containing 42 [Source:HGNC Symbol;Acc:26528] | |
| CCDC45 | Coiled-coil domain containing 45 [Source:HGNC Symbol;Acc:25141] | |
| CCDC50 | Coiled-coil domain containing 50 [Source:HGNC Symbol;Acc:18111] | |
| CCDC55 | Coiled-coil domain containing 55 [Source:HGNC Symbol;Acc:25305] | |
| CCDC58 | Coiled-coil domain containing 58 [Source:HGNC Symbol;Acc:31136] | |
| CCDC60 | Coiled-coil domain containing 60 [Source:HGNC Symbol;Acc:28610] | |
| CCDC62 | Coiled-coil domain containing 62 [Source:HGNC Symbol;Acc:30723] | |
| CCDC63 | Coiled-coil domain containing 63 [Source:HGNC Symbol;Acc:26669] | |
| CCDC64 | Coiled-coil domain containing 64 [Source:HGNC Symbol;Acc:28095] | |
| CCDC66 | Coiled-coil domain containing 66 [Source:HGNC Symbol;Acc:27709] | |
| CCDC78 | Coiled-coil domain containing 78 [Source:HGNC Symbol;Acc:14153] | |
| CCDC80 | Coiled-coil domain containing 80 [Source:HGNC Symbol;Acc:30649] | |
| CCDC81 | Coiled-coil domain containing 81 [Source:HGNC Symbol;Acc:26281] | |
| CCDC88A | Coiled-coil domain containing 88A [Source:HGNC Symbol;Acc:25523] | |
| CCDC88B | Coiled-coil domain containing 88B [Source:HGNC Symbol;Acc:26757] | |
| CCDC88C | Coiled-coil domain containing 88C [Source:HGNC Symbol;Acc:19967] | |
| CCDC9 | Coiled-coil domain containing 9 [Source:HGNC Symbol;Acc:24560] | |
| CCDC92 | Coiled-coil domain containing 92 [Source:HGNC Symbol;Acc:29563] | |
| CCDC94 | Coiled-coil domain containing 94 [Source:HGNC Symbol;Acc:25518] | |
| CCDC97 | Coiled-coil domain containing 97 [Source:HGNC Symbol;Acc:28289] | |
| CCDC99 | Coiled-coil domain containing 99 [Source:HGNC Symbol;Acc:26010] | |

| | | |
|----------------|---|---|
| CCHCR1 | Coiled-coil alpha-helical rod protein 1 [Source:HGNC Symbol;Acc:13930] | |
| CCIN | Calicin [Source:HGNC Symbol;Acc:1568] | |
| CCKAR | Cholecystokinin A receptor [Source:HGNC Symbol;Acc:1570] | |
| CCKBR | Cholecystokinin B receptor [Source:HGNC Symbol;Acc:1571] | |
| CCL1 | Chemokine (C-C motif) ligand 1 [Source:HGNC Symbol;Acc:10609] | |
| CCL11 | Chemokine (C-C motif) ligand 11 [Source:HGNC Symbol;Acc:10610] | |
| CCL18 | Chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated) [Source:HGNC Symbol;Acc:10616] | |
| CCL19 | Chemokine (C-C motif) ligand 19 [Source:HGNC Symbol;Acc:10617] | |
| CCL22 | Chemokine (C-C motif) ligand 22 [Source:HGNC Symbol;Acc:10621] | |
| CCNB3 | Cyclin B3 [Source:HGNC Symbol;Acc:18709] | |
| CCNC | Cyclin C [Source:HGNC Symbol;Acc:1581] | |
| CCND1 | Cyclin D1 | √ |
| CCNE2 | Cyclin E2 [Source:HGNC Symbol;Acc:1590] | |
| CCNG1 | Cyclin G1 [Source:HGNC Symbol;Acc:1592] | |
| CCNI | Cyclin I [Source:HGNC Symbol;Acc:1595] | |
| CCNI2 | Cyclin I family, member 2 [Source:HGNC Symbol;Acc:33869] | |
| CCNK | Cyclin K [Source:HGNC Symbol;Acc:1596] | |
| CCNY | Cyclin Y [Source:HGNC Symbol;Acc:23354] | |
| CCNYL1 | Cyclin Y-like 1 [Source:HGNC Symbol;Acc:26868] | |
| CCR4 | Chemokine (C-C motif) receptor 4 [Source:HGNC Symbol;Acc:1605] | |
| CCR7 | Chemokine (C-C motif) receptor 7 [Source:HGNC Symbol;Acc:1608] | |
| CCT5 | Chaperonin containing TCP1, subunit 5 (epsilon) [Source:HGNC Symbol;Acc:1618] | |
| CCT6A | Chaperonin containing TCP1, subunit 6A (zeta 1) [Source:HGNC Symbol;Acc:1620] | |
| CCT8L2 | Chaperonin containing TCP1, subunit 8 (theta)-like 2 [Source:HGNC Symbol;Acc:15553] | |
| CD101 | CD101 molecule [Source:HGNC Symbol;Acc:5949] | |
| CD109 | CD109 molecule [Source:HGNC Symbol;Acc:21685] | |
| CD163 | CD163 molecule [Source:HGNC Symbol;Acc:1631] | |
| CD163L1 | CD163 molecule-like 1 [Source:HGNC Symbol;Acc:30375] | |
| CD19 | CD19 molecule [Source:HGNC Symbol;Acc:1633] | |

| | | |
|----------------|---|---|
| CD1E | CD1e molecule [Source:HGNC Symbol;Acc:1638] | |
| CD209 | CD209 molecule [Source:HGNC Symbol;Acc:1641] | |
| CD226 | CD226 molecule [Source:HGNC Symbol;Acc:16961] | |
| CD27 | CD27 molecule [Source:HGNC Symbol;Acc:11922] | |
| CD28 | CD28 molecule [Source:HGNC Symbol;Acc:1653] | |
| CD2BP2 | CD2 (cytoplasmic tail) binding protein 2 [Source:HGNC Symbol;Acc:1656] | |
| CD300A | CD300a molecule [Source:HGNC Symbol;Acc:19319] | |
| CD300LB | CD300 molecule-like family member b [Source:HGNC Symbol;Acc:30811] | |
| CD320 | CD320 molecule [Source:HGNC Symbol;Acc:16692] | |
| CD34 | CD34 molecule [Source:HGNC Symbol;Acc:1662] | |
| CD3E | CD3e molecule, epsilon (CD3-TCR complex) [Source:HGNC Symbol;Acc:1674] | |
| CD4 | CD4 molecule [Source:HGNC Symbol;Acc:1678] | |
| CD40 | CD40 molecule, TNF receptor superfamily member 5 [Source:HGNC Symbol;Acc:11919] | |
| CD46 | CD46 molecule, complement regulatory protein [Source:HGNC Symbol;Acc:6953] | |
| CD59 | CD59 molecule, complement regulatory protein [Source:HGNC Symbol;Acc:1689] | |
| CD72 | CD72 molecule [Source:HGNC Symbol;Acc:1696] | |
| CD74 | CD74 molecule, major histocompatibility complex, class II invariant chain | √ |
| CD83 | CD83 molecule [Source:HGNC Symbol;Acc:1703] | |
| CD86 | CD86 molecule [Source:HGNC Symbol;Acc:1705] | |
| CD96 | CD96 molecule [Source:HGNC Symbol;Acc:16892] | |
| CD99L2 | CD99 molecule-like 2 [Source:HGNC Symbol;Acc:18237] | |
| CDC16 | Cell division cycle 16 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:1720] | |
| CDC20 | Cell division cycle 20 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:1723] | |
| CDC25A | Cell division cycle 25 homolog A (S. Pombe) [Source:HGNC Symbol;Acc:1725] | |
| CDC27 | Cell division cycle 27 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:1728] | |

| | | |
|-----------------|--|---|
| CDC37L1 | Cell division cycle 37 homolog (S. Cerevisiae)-like 1 [Source:HGNC Symbol;Acc:17179] | |
| CDC42 | Cell division cycle 42 (GTP binding protein, 25kda) [Source:HGNC Symbol;Acc:1736] | |
| CDC42BPA | CDC42 binding protein kinase alpha (DMPK-like) [Source:HGNC Symbol;Acc:1737] | |
| CDC42BPB | CDC42 binding protein kinase beta (DMPK-like) [Source:HGNC Symbol;Acc:1738] | |
| CDC42BPG | CDC42 binding protein kinase gamma (DMPK-like) [Source:HGNC Symbol;Acc:29829] | |
| CDC42EP1 | CDC42 effector protein (Rho gtpase binding) 1 [Source:HGNC Symbol;Acc:17014] | |
| CDC42EP2 | CDC42 effector protein (Rho gtpase binding) 2 [Source:HGNC Symbol;Acc:16263] | |
| CDC42EP3 | CDC42 effector protein (Rho gtpase binding) 3 [Source:HGNC Symbol;Acc:16943] | |
| CDC42SE1 | CDC42 small effector 1 [Source:HGNC Symbol;Acc:17719] | |
| CDC42SE2 | CDC42 small effector 2 [Source:HGNC Symbol;Acc:18547] | |
| CDC5L | CDC5 cell division cycle 5-like (S. Pombe) [Source:HGNC Symbol;Acc:1743] | |
| CDCA2 | Cell division cycle associated 2 [Source:HGNC Symbol;Acc:14623] | |
| CDCA3 | Cell division cycle associated 3 [Source:HGNC Symbol;Acc:14624] | |
| CDCA8 | Cell division cycle associated 8 [Source:HGNC Symbol;Acc:14629] | |
| CDCP1 | CUB domain containing protein 1 [Source:HGNC Symbol;Acc:24357] | |
| CDH1 | Cadherin 1, type 1, E-cadherin (epithelial) | √ |
| CDH12 | Cadherin 12, type 2 (N-cadherin 2) [Source:HGNC Symbol;Acc:1751] | |
| CDH15 | Cadherin 15, type 1, M-cadherin (myotubule) [Source:HGNC Symbol;Acc:1754] | |
| CDH2 | Cadherin 2, type 1, N-cadherin (neuronal) [Source:HGNC Symbol;Acc:1759] | |
| CDH20 | Cadherin 20, type 2 [Source:HGNC Symbol;Acc:1760] | |
| CDH23 | Cadherin-related 23 [Source:HGNC Symbol;Acc:13733] | |
| CDH26 | Cadherin 26 [Source:HGNC Symbol;Acc:15902] | |

| | | |
|-----------------|---|---|
| CDH3 | Cadherin 3, type 1, P-cadherin (placental) [Source:HGNC Symbol;Acc:1762] | |
| CDH4 | Cadherin 4, type 1, R-cadherin (retinal) [Source:HGNC Symbol;Acc:1763] | |
| CDH5 | Cadherin 5, type 2 (vascular endothelium) [Source:HGNC Symbol;Acc:1764] | |
| CDH6 | Cadherin 6, type 2, K-cadherin (fetal kidney) [Source:HGNC Symbol;Acc:1765] | |
| CDH7 | Cadherin 7, type 2 [Source:HGNC Symbol;Acc:1766] | |
| CDH9 | Cadherin 9, type 2 (T1-cadherin) [Source:HGNC Symbol;Acc:1768] | |
| CDHR1 | Cadherin-related family member 1 [Source:HGNC Symbol;Acc:14550] | |
| CDK11A | Cyclin-dependent kinase 11A [Source:HGNC Symbol;Acc:1730] | |
| CDK14 | Cyclin-dependent kinase 14 [Source:HGNC Symbol;Acc:8883] | |
| CDK17 | Cyclin-dependent kinase 17 [Source:HGNC Symbol;Acc:8750] | |
| CDK18 | Cyclin-dependent kinase 18 [Source:HGNC Symbol;Acc:8751] | |
| CDK19 | Cyclin-dependent kinase 19 [Source:HGNC Symbol;Acc:19338] | |
| CDK20 | Cyclin-dependent kinase 20 [Source:HGNC Symbol;Acc:21420] | |
| CDK4 | Cyclin-dependent kinase 4 | √ |
| CDK5RAP1 | CDK5 regulatory subunit associated protein 1 [Source:HGNC Symbol;Acc:15880] | |
| CDK5RAP2 | CDK5 regulatory subunit associated protein 2 [Source:HGNC Symbol;Acc:18672] | |
| CDKL1 | Cyclin-dependent kinase-like 1 (CDC2-related kinase) [Source:HGNC Symbol;Acc:1781] | |
| CDKN1B | Cyclin-dependent kinase inhibitor 1B (p27, Kip1) [Source:HGNC Symbol;Acc:1785] | |
| CDKN2AIP | CDKN2A interacting protein [Source:HGNC Symbol;Acc:24325] | |
| CDKN2B | Cyclin-dependent kinase inhibitor 2B (p15, inhibits CDK4) [Source:HGNC Symbol;Acc:1788] | |
| CDKN2D | Cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4) [Source:HGNC Symbol;Acc:1790] | |
| CDON | Cdon homolog (mouse) [Source:HGNC Symbol;Acc:17104] | |
| CDR2L | Cerebellar degeneration-related protein 2-like [Source:HGNC Symbol;Acc:29999] | |

| | | |
|-----------------|---|--|
| CDS2 | CDP-diacylglycerol synthase (phosphatidate cytidyltransferase) 2 [Source:HGNC Symbol;Acc:1801] | |
| CEACAM21 | Carcinoembryonic antigen-related cell adhesion molecule 21 [Source:HGNC Symbol;Acc:28834] | |
| CEBPD | CCAAT/enhancer binding protein (C/EBP), delta [Source:HGNC Symbol;Acc:1835] | |
| CEBPG | CCAAT/enhancer binding protein (C/EBP), gamma [Source:HGNC Symbol;Acc:1837] | |
| CEBPZ | CCAAT/enhancer binding protein (C/EBP), zeta [Source:HGNC Symbol;Acc:24218] | |
| CECR6 | Cat eye syndrome chromosome region, candidate 6 [Source:HGNC Symbol;Acc:1844] | |
| CELA1 | Chymotrypsin-like elastase family, member 1 [Source:HGNC Symbol;Acc:3308] | |
| CELA3A | Chymotrypsin-like elastase family, member 3A [Source:HGNC Symbol;Acc:15944] | |
| CELF1 | CUGBP, Elav-like family member 1 [Source:HGNC Symbol;Acc:2549] | |
| CELF2 | CUGBP, Elav-like family member 2 [Source:HGNC Symbol;Acc:2550] | |
| CELF5 | CUGBP, Elav-like family member 5 [Source:HGNC Symbol;Acc:14058] | |
| CELSR1 | Cadherin, EGF LAG seven-pass G-type receptor 1 (flamingo homolog, Drosophila) [Source:HGNC Symbol;Acc:1850] | |
| CELSR2 | Cadherin, EGF LAG seven-pass G-type receptor 2 (flamingo homolog, Drosophila) [Source:HGNC Symbol;Acc:3231] | |
| CELSR3 | Cadherin, EGF LAG seven-pass G-type receptor 3 (flamingo homolog, Drosophila) [Source:HGNC Symbol;Acc:3230] | |
| CEND1 | Cell cycle exit and neuronal differentiation 1 [Source:HGNC Symbol;Acc:24153] | |
| CENPC1 | Centromere protein C 1 [Source:HGNC Symbol;Acc:1854] | |
| CENPK | Centromere protein K [Source:HGNC Symbol;Acc:29479] | |
| CENPO | Centromere protein O [Source:HGNC Symbol;Acc:28152] | |
| CENPP | Centromere protein P [Source:HGNC Symbol;Acc:32933] | |
| CEP110 | Centrosomal protein 110kda [Source:HGNC Symbol;Acc:1858] | |
| CEP135 | Centrosomal protein 135kda [Source:HGNC Symbol;Acc:29086] | |

| | | |
|---------------|--|---|
| CEP152 | Centrosomal protein 152kda [Source:HGNC Symbol;Acc:29298] | |
| CEP164 | Centrosomal protein 164kda [Source:HGNC Symbol;Acc:29182] | |
| CEP170 | Centrosomal protein 170kda [Source:HGNC Symbol;Acc:28920] | |
| CEP250 | Centrosomal protein 250kda [Source:HGNC Symbol;Acc:1859] | |
| CEP350 | Centrosomal protein 350kda [Source:HGNC Symbol;Acc:24238] | |
| CEP63 | Centrosomal protein 63kda [Source:HGNC Symbol;Acc:25815] | |
| CEP68 | Centrosomal protein 68kda [Source:HGNC Symbol;Acc:29076] | |
| CEP72 | Centrosomal protein 72kda [Source:HGNC Symbol;Acc:25547] | |
| CEP78 | Centrosomal protein 78kda [Source:HGNC Symbol;Acc:25740] | |
| CEP97 | Centrosomal protein 97kda [Source:HGNC Symbol;Acc:26244] | |
| CES1 | Carboxylesterase 1 [Source:HGNC Symbol;Acc:1863] | |
| CES2 | Carboxylesterase 2 [Source:HGNC Symbol;Acc:1864] | |
| CES3 | Carboxylesterase 3 [Source:HGNC Symbol;Acc:1865] | |
| CES5A | Carboxylesterase 5A [Source:HGNC Symbol;Acc:26459] | |
| CFC1 | Cripto, FRL-1, cryptic family 1 [Source:HGNC Symbol;Acc:18292] | |
| CFC1B | Cripto, FRL-1, cryptic family 1B [Source:HGNC Symbol;Acc:33983] | |
| CFHR5 | Complement factor H-related 5 [Source:HGNC Symbol;Acc:24668] | |
| CFI | Complement factor I [Source:HGNC Symbol;Acc:5394] | |
| CFL1 | Cofilin 1 (non-muscle) [Source:HGNC Symbol;Acc:1874] | |
| CFP | Complement factor properdin [Source:HGNC Symbol;Acc:8864] | |
| CGGBP1 | CGG triplet repeat binding protein 1 [Source:HGNC Symbol;Acc:1888] | |
| CGNL1 | Cingulin-like 1 [Source:HGNC Symbol;Acc:25931] | |
| CGREF1 | Cell growth regulator with EF-hand domain 1 [Source:HGNC Symbol;Acc:16962] | |
| CGRRF1 | Cell growth regulator with ring finger domain 1 [Source:HGNC Symbol;Acc:15528] | |
| CHCHD5 | Coiled-coil-helix-coiled-coil-helix domain containing 5 [Source:HGNC Symbol;Acc:17840] | |
| CHCHD7 | Coiled-coil-helix-coiled-coil-helix domain containing 7 [Source:HGNC Symbol;Acc:28314] | √ |
| CHCHD8 | Coiled-coil-helix-coiled-coil-helix domain containing 8 [Source:HGNC Symbol;Acc:24604] | |

| | | |
|---------------|---|---|
| CHD1 | Chromodomain helicase DNA binding protein 1 [Source:HGNC Symbol;Acc:1915] | |
| CHD1L | Chromodomain helicase DNA binding protein 1-like [Source:HGNC Symbol;Acc:1916] | |
| CHD2 | Chromodomain helicase DNA binding protein 2 [Source:HGNC Symbol;Acc:1917] | |
| CHD3 | Chromodomain helicase DNA binding protein 3 [Source:HGNC Symbol;Acc:1918] | |
| CHD4 | Chromodomain helicase DNA binding protein 4 [Source:HGNC Symbol;Acc:1919] | |
| CHD6 | Chromodomain helicase DNA binding protein 6 [Source:HGNC Symbol;Acc:19057] | |
| CHD7 | Chromodomain helicase DNA binding protein 7 [Source:HGNC Symbol;Acc:20626] | |
| CHD9 | Chromodomain helicase DNA binding protein 9 [Source:HGNC Symbol;Acc:25701] | |
| CHEK2 | CHK2 checkpoint homolog (<i>S. Pombe</i>) | √ |
| CHERP | Calcium homeostasis endoplasmic reticulum protein [Source:HGNC Symbol;Acc:16930] | |
| CHFR | Checkpoint with forkhead and ring finger domains [Source:HGNC Symbol;Acc:20455] | |
| CHGA | Chromogranin A (parathyroid secretory protein 1) [Source:HGNC Symbol;Acc:1929] | |
| CHI3L2 | Chitinase 3-like 2 [Source:HGNC Symbol;Acc:1933] | |
| CHID1 | Chitinase domain containing 1 [Source:HGNC Symbol;Acc:28474] | |
| CHIT1 | Chitinase 1 (chitotriosidase) [Source:HGNC Symbol;Acc:1936] | |
| CHL1 | Cell adhesion molecule with homology to L1CAM (close homolog of L1) [Source:HGNC Symbol;Acc:1939] | |
| CHML | Choroideremia-like (Rab escort protein 2) [Source:HGNC Symbol;Acc:1941] | |
| CHMP1A | Chromatin modifying protein 1A [Source:HGNC Symbol;Acc:8740] | |
| CHMP2B | Chromatin modifying protein 2B [Source:HGNC Symbol;Acc:24537] | |
| CHMP7 | CHMP family, member 7 [Source:HGNC Symbol;Acc:28439] | |

| | | |
|----------------|---|---|
| CHN1 | Chimerin (chimaerin) 1 | √ |
| CHPF | Chondroitin polymerizing factor [Source:HGNC Symbol;Acc:24291] | |
| CHPF2 | Chondroitin polymerizing factor 2 [Source:HGNC Symbol;Acc:29270] | |
| CHRDL1 | Chordin-like 1 [Source:HGNC Symbol;Acc:29861] | |
| CHRM1 | Cholinergic receptor, muscarinic 1 [Source:HGNC Symbol;Acc:1950] | |
| CHRM2 | Cholinergic receptor, muscarinic 2 [Source:HGNC Symbol;Acc:1951] | |
| CHRM3 | Cholinergic receptor, muscarinic 3 [Source:HGNC Symbol;Acc:1952] | |
| CHRNA10 | Cholinergic receptor, nicotinic, alpha 10 [Source:HGNC Symbol;Acc:13800] | |
| CHRNA2 | Cholinergic receptor, nicotinic, alpha 2 (neuronal) [Source:HGNC Symbol;Acc:1956] | |
| CHRNA7 | Cholinergic receptor, nicotinic, alpha 7 [Source:HGNC Symbol;Acc:1960] | |
| CHRNB2 | Cholinergic receptor, nicotinic, beta 2 (neuronal) [Source:HGNC Symbol;Acc:1962] | |
| CHRNB3 | Cholinergic receptor, nicotinic, beta 3 [Source:HGNC Symbol;Acc:1963] | |
| CHRNB4 | Cholinergic receptor, nicotinic, beta 4 [Source:HGNC Symbol;Acc:1964] | |
| CHRND | Cholinergic receptor, nicotinic, delta [Source:HGNC Symbol;Acc:1965] | |
| CHST11 | Carbohydrate (chondroitin 4) sulfotransferase 11 [Source:HGNC Symbol;Acc:17422] | |
| CHST14 | Carbohydrate (N-acetylgalactosamine 4-O) sulfotransferase 14 [Source:HGNC Symbol;Acc:24464] | |
| CHST3 | Carbohydrate (chondroitin 6) sulfotransferase 3 [Source:HGNC Symbol;Acc:1971] | |
| CHST5 | Carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 5 [Source:HGNC Symbol;Acc:1973] | |
| CHST6 | Carbohydrate (N-acetylglucosamine 6-O) sulfotransferase 6 [Source:HGNC Symbol;Acc:6938] | |
| CHSY3 | Chondroitin sulfate synthase 3 [Source:HGNC Symbol;Acc:24293] | |
| CIDEB | Cell death-inducing DFFA-like effector b [Source:HGNC Symbol;Acc:1977] | |
| CIITA | Class II, major histocompatibility complex, transactivator | √ |
| CILP2 | Cartilage intermediate layer protein 2 [Source:HGNC Symbol;Acc:24213] | |
| CIRBP | Cold inducible RNA binding protein [Source:HGNC Symbol;Acc:1982] | |

| | | |
|----------------|--|--|
| CISD1 | CDGSH iron sulfur domain 1 [Source:HGNC Symbol;Acc:30880] | |
| CIT | Citron (rho-interacting, serine/threonine kinase 21) [Source:HGNC Symbol;Acc:1985] | |
| CKAP2L | Cytoskeleton associated protein 2-like [Source:HGNC Symbol;Acc:26877] | |
| CKAP4 | Cytoskeleton-associated protein 4 [Source:HGNC Symbol;Acc:16991] | |
| CKAP5 | Cytoskeleton associated protein 5 [Source:HGNC Symbol;Acc:28959] | |
| CKS1B | CDC28 protein kinase regulatory subunit 1B [Source:HGNC Symbol;Acc:19083] | |
| CLASP1 | Cytoplasmic linker associated protein 1 [Source:HGNC Symbol;Acc:17088] | |
| CLASP2 | Cytoplasmic linker associated protein 2 [Source:HGNC Symbol;Acc:17078] | |
| CLCA2 | Chloride channel accessory 2 [Source:HGNC Symbol;Acc:2016] | |
| CLCF1 | Cardiotrophin-like cytokine factor 1 [Source:HGNC Symbol;Acc:17412] | |
| CLCN2 | Chloride channel 2 [Source:HGNC Symbol;Acc:2020] | |
| CLCN3 | Chloride channel 3 [Source:HGNC Symbol;Acc:2021] | |
| CLCN4 | Chloride channel 4 [Source:HGNC Symbol;Acc:2022] | |
| CLCN5 | Chloride channel 5 [Source:HGNC Symbol;Acc:2023] | |
| CLCN6 | Chloride channel 6 [Source:HGNC Symbol;Acc:2024] | |
| CLCN7 | Chloride channel 7 [Source:HGNC Symbol;Acc:2025] | |
| CLCNKA | Chloride channel Ka [Source:HGNC Symbol;Acc:2026] | |
| CLCNKB | Chloride channel Kb [Source:HGNC Symbol;Acc:2027] | |
| CLDN10 | Claudin 10 [Source:HGNC Symbol;Acc:2033] | |
| CLDN16 | Claudin 16 [Source:HGNC Symbol;Acc:2037] | |
| CLDN20 | Claudin 20 [Source:HGNC Symbol;Acc:2042] | |
| CLDN8 | Claudin 8 [Source:HGNC Symbol;Acc:2050] | |
| CLDN9 | Claudin 9 [Source:HGNC Symbol;Acc:2051] | |
| CLEC17A | C-type lectin domain family 17, member A [Source:HGNC Symbol;Acc:34520] | |
| CLEC18A | C-type lectin domain family 18, member A [Source:HGNC Symbol;Acc:30388] | |
| CLEC18B | C-type lectin domain family 18, member B [Source:HGNC Symbol;Acc:33849] | |
| CLEC18C | C-type lectin domain family 18, member C [Source:HGNC Symbol;Acc:28538] | |

| | | |
|----------------|---|---|
| CLEC4A | C-type lectin domain family 4, member A [Source:HGNC Symbol;Acc:13257] | |
| CLEC6A | C-type lectin domain family 6, member A [Source:HGNC Symbol;Acc:14556] | |
| CLIC3 | Chloride intracellular channel 3 [Source:HGNC Symbol;Acc:2064] | |
| CLINT1 | Clathrin interactor 1 [Source:HGNC Symbol;Acc:23186] | |
| CLIP1 | CAP-GLY domain containing linker protein 1 [Source:HGNC Symbol;Acc:10461] | |
| CLIP2 | CAP-GLY domain containing linker protein 2 [Source:HGNC Symbol;Acc:2586] | |
| CLIP4 | CAP-GLY domain containing linker protein family, member 4 [Source:HGNC Symbol;Acc:26108] | |
| CLK1 | CDC-like kinase 1 [Source:HGNC Symbol;Acc:2068] | |
| CLMN | Calmin (calponin-like, transmembrane) [Source:HGNC Symbol;Acc:19972] | |
| CLN6 | Ceroid-lipofuscinosis, neuronal 6, late infantile, variant [Source:HGNC Symbol;Acc:2077] | |
| CLN8 | Ceroid-lipofuscinosis, neuronal 8 (epilepsy, progressive with mental retardation) [Source:HGNC Symbol;Acc:2079] | |
| CLNK | Cytokine-dependent hematopoietic cell linker [Source:HGNC Symbol;Acc:17438] | |
| CLOCK | Clock homolog (mouse) [Source:HGNC Symbol;Acc:2082] | |
| CLP1 | CLP1, cleavage and polyadenylation factor I subunit, homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:16999] | |
| CLPTM1L | CLPTM1-like [Source:HGNC Symbol;Acc:24308] | |
| CLSPN | Claspin [Source:HGNC Symbol;Acc:19715] | |
| CLTC | Clathrin, heavy chain (Hc) | √ |
| CLVS1 | Clavesin 1 [Source:HGNC Symbol;Acc:23139] | |
| CLYBL | Citrate lyase beta like [Source:HGNC Symbol;Acc:18355] | |
| CMTM5 | CKLF-like MARVEL transmembrane domain containing 5 [Source:HGNC Symbol;Acc:19176] | |
| CMYA5 | Cardiomyopathy associated 5 [Source:HGNC Symbol;Acc:14305] | |
| CNDP1 | Carnosine dipeptidase 1 (metallopeptidase M20 family) [Source:HGNC Symbol;Acc:20675] | |

| | | |
|----------------|---|--|
| CNGB1 | Cyclic nucleotide gated channel beta 1 [Source:HGNC Symbol;Acc:2151] | |
| CNGB3 | Cyclic nucleotide gated channel beta 3 [Source:HGNC Symbol;Acc:2153] | |
| CNIH3 | Cornichon homolog 3 (Drosophila) [Source:HGNC Symbol;Acc:26802] | |
| CNKSR2 | Connector enhancer of kinase suppressor of Ras 2 [Source:HGNC Symbol;Acc:19701] | |
| CNN3 | Calponin 3, acidic [Source:HGNC Symbol;Acc:2157] | |
| CNNM1 | Cyclin M1 [Source:HGNC Symbol;Acc:102] | |
| CNNM2 | Cyclin M2 [Source:HGNC Symbol;Acc:103] | |
| CNO | Cappuccino homolog (mouse) [Source:HGNC Symbol;Acc:24206] | |
| CNOT1 | CCR4-NOT transcription complex, subunit 1 [Source:HGNC Symbol;Acc:7877] | |
| CNOT10 | CCR4-NOT transcription complex, subunit 10 [Source:HGNC Symbol;Acc:23817] | |
| CNOT6L | CCR4-NOT transcription complex, subunit 6-like [Source:HGNC Symbol;Acc:18042] | |
| CNOT7 | CCR4-NOT transcription complex, subunit 7 [Source:HGNC Symbol;Acc:14101] | |
| CNP | 2',3'-cyclic nucleotide 3' phosphodiesterase [Source:HGNC Symbol;Acc:2158] | |
| CNR1 | Cannabinoid receptor 1 (brain) [Source:HGNC Symbol;Acc:2159] | |
| CNR2 | Cannabinoid receptor 2 (macrophage) [Source:HGNC Symbol;Acc:2160] | |
| CNRIP1 | Cannabinoid receptor interacting protein 1 [Source:HGNC Symbol;Acc:24546] | |
| CNST | Consortin, connexin sorting protein [Source:HGNC Symbol;Acc:26486] | |
| CNTN2 | Contactin 2 (axonal) [Source:HGNC Symbol;Acc:2172] | |
| CNTN3 | Contactin 3 (plasmacytoma associated) [Source:HGNC Symbol;Acc:2173] | |
| CNTN6 | Contactin 6 [Source:HGNC Symbol;Acc:2176] | |
| CNTNAP1 | Contactin associated protein 1 [Source:HGNC Symbol;Acc:8011] | |
| CNTNAP2 | Contactin associated protein-like 2 [Source:HGNC Symbol;Acc:13830] | |
| CNTNAP4 | Contactin associated protein-like 4 [Source:HGNC Symbol;Acc:18747] | |
| CNTNAP5 | Contactin associated protein-like 5 [Source:HGNC Symbol;Acc:18748] | |
| CNTROB | Centrobin, centrosomal BRCA2 interacting protein [Source:HGNC Symbol;Acc:29616] | |

| | | |
|----------------|---|---|
| COASY | Coa synthase [Source:HGNC Symbol;Acc:29932] | |
| COBL | Cordon-bleu homolog (mouse) [Source:HGNC Symbol;Acc:22199] | |
| COBLL1 | COBL-like 1 [Source:HGNC Symbol;Acc:23571] | |
| COG5 | Component of oligomeric golgi complex 5 [Source:HGNC Symbol;Acc:14857] | |
| COG8 | Component of oligomeric golgi complex 8 [Source:HGNC Symbol;Acc:18623] | |
| COL12A1 | Collagen, type XII, alpha 1 [Source:HGNC Symbol;Acc:2188] | |
| COL14A1 | Collagen, type XIV, alpha 1 [Source:HGNC Symbol;Acc:2191] | |
| COL16A1 | Collagen, type XVI, alpha 1 [Source:HGNC Symbol;Acc:2193] | |
| COL17A1 | Collagen, type XVII, alpha 1 [Source:HGNC Symbol;Acc:2194] | |
| COL19A1 | Collagen, type XIX, alpha 1 [Source:HGNC Symbol;Acc:2196] | |
| COL1A1 | Collagen, type I, alpha 1 | √ |
| COL20A1 | Collagen, type XX, alpha 1 [Source:HGNC Symbol;Acc:14670] | |
| COL22A1 | Collagen, type XXII, alpha 1 [Source:HGNC Symbol;Acc:22989] | |
| COL23A1 | Collagen, type XXIII, alpha 1 [Source:HGNC Symbol;Acc:22990] | |
| COL27A1 | Collagen, type XXVII, alpha 1 [Source:HGNC Symbol;Acc:22986] | |
| COL28A1 | Collagen, type XXVIII, alpha 1 [Source:HGNC Symbol;Acc:22442] | |
| COL3A1 | Collagen, type III, alpha 1 [Source:HGNC Symbol;Acc:2201] | |
| COL4A4 | Collagen, type IV, alpha 4 [Source:HGNC Symbol;Acc:2206] | |
| COL5A1 | Collagen, type V, alpha 1 [Source:HGNC Symbol;Acc:2209] | |
| COL5A2 | Collagen, type V, alpha 2 [Source:HGNC Symbol;Acc:2210] | |
| COL6A2 | Collagen, type VI, alpha 2 [Source:HGNC Symbol;Acc:2212] | |
| COL6A3 | Collagen, type VI, alpha 3 [Source:HGNC Symbol;Acc:2213] | |
| COL6A5 | Collagen, type VI, alpha 5 [Source:HGNC Symbol;Acc:26674] | |
| COL6A6 | Collagen, type VI, alpha 6 [Source:HGNC Symbol;Acc:27023] | |
| COL7A1 | Collagen, type VII, alpha 1 [Source:HGNC Symbol;Acc:2214] | |
| COL9A2 | Collagen, type IX, alpha 2 [Source:HGNC Symbol;Acc:2218] | |
| COL9A3 | Collagen, type IX, alpha 3 [Source:HGNC Symbol;Acc:2219] | |
| COLEC12 | Collectin sub-family member 12 [Source:HGNC Symbol;Acc:16016] | |
| COLQ | Collagen-like tail subunit (single strand of homotrimer) of asymmetric acetylcholinesterase [Source:HGNC Symbol;Acc:2226] | |
| COMM3 | COMM domain containing 3 [Source:HGNC Symbol;Acc:23332] | |

| | | |
|---------------|---|--|
| COMMD7 | COMM domain containing 7 [Source:HGNC Symbol;Acc:16223] | |
| COMP | Cartilage oligomeric matrix protein [Source:HGNC Symbol;Acc:2227] | |
| COMT | Catechol-O-methyltransferase [Source:HGNC Symbol;Acc:2228] | |
| COPB2 | Coatomer protein complex, subunit beta 2 (beta prime) [Source:HGNC Symbol;Acc:2232] | |
| COPS2 | COP9 constitutive photomorphogenic homolog subunit 2 (Arabidopsis) [Source:HGNC Symbol;Acc:30747] | |
| COPS4 | COP9 constitutive photomorphogenic homolog subunit 4 (Arabidopsis) [Source:HGNC Symbol;Acc:16702] | |
| COPS6 | COP9 constitutive photomorphogenic homolog subunit 6 (Arabidopsis) [Source:HGNC Symbol;Acc:21749] | |
| COPS7A | COP9 constitutive photomorphogenic homolog subunit 7A (Arabidopsis) [Source:HGNC Symbol;Acc:16758] | |
| COPS7B | COP9 constitutive photomorphogenic homolog subunit 7B (Arabidopsis) [Source:HGNC Symbol;Acc:16760] | |
| COPS8 | COP9 constitutive photomorphogenic homolog subunit 8 (Arabidopsis) [Source:HGNC Symbol;Acc:24335] | |
| COPZ1 | Coatomer protein complex, subunit zeta 1 [Source:HGNC Symbol;Acc:2243] | |
| COQ4 | Coenzyme Q4 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:19693] | |
| COQ9 | Coenzyme Q9 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:25302] | |
| CORIN | Corin, serine peptidase [Source:HGNC Symbol;Acc:19012] | |
| CORO1B | Coronin, actin binding protein, 1B [Source:HGNC Symbol;Acc:2253] | |
| CORO1C | Coronin, actin binding protein, 1C [Source:HGNC Symbol;Acc:2254] | |
| CORO2A | Coronin, actin binding protein, 2A [Source:HGNC Symbol;Acc:2255] | |
| CORO2B | Coronin, actin binding protein, 2B [Source:HGNC Symbol;Acc:2256] | |
| CORO7 | Coronin 7 [Source:HGNC Symbol;Acc:26161] | |
| COX15 | COX15 homolog, cytochrome c oxidase assembly protein (yeast) [Source:HGNC Symbol;Acc:2263] | |
| COX18 | COX18 cytochrome c oxidase assembly homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:26801] | |
| COX19 | COX19 cytochrome c oxidase assembly homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:28074] | |

| | | |
|---------------|---|--|
| COX4I1 | Cytochrome c oxidase subunit IV isoform 1 [Source:HGNC Symbol;Acc:2265] | |
| COX6B2 | Cytochrome c oxidase subunit vib polypeptide 2 (testis) [Source:HGNC Symbol;Acc:24380] | |
| CPA1 | Carboxypeptidase A1 (pancreatic) [Source:HGNC Symbol;Acc:2296] | |
| CPA2 | Carboxypeptidase A2 (pancreatic) [Source:HGNC Symbol;Acc:2297] | |
| CPA3 | Carboxypeptidase A3 (mast cell) [Source:HGNC Symbol;Acc:2298] | |
| CPA5 | Carboxypeptidase A5 [Source:HGNC Symbol;Acc:15722] | |
| CPAMD8 | C3 and PZP-like, alpha-2-macroglobulin domain containing 8 [Source:HGNC Symbol;Acc:23228] | |
| CPB1 | Carboxypeptidase B1 (tissue) [Source:HGNC Symbol;Acc:2299] | |
| CPEB1 | Cytoplasmic polyadenylation element binding protein 1 [Source:HGNC Symbol;Acc:21744] | |
| CPLX4 | Complexin 4 [Source:HGNC Symbol;Acc:24330] | |
| CPM | Carboxypeptidase M [Source:HGNC Symbol;Acc:2311] | |
| CPNE2 | Copine II [Source:HGNC Symbol;Acc:2315] | |
| CPNE3 | Copine III [Source:HGNC Symbol;Acc:2316] | |
| CPNE4 | Copine IV [Source:HGNC Symbol;Acc:2317] | |
| CPNE5 | Copine V [Source:HGNC Symbol;Acc:2318] | |
| CPNE8 | Copine VIII [Source:HGNC Symbol;Acc:23498] | |
| CPNE9 | Copine family member IX [Source:HGNC Symbol;Acc:24336] | |
| CPOX | Coproporphyrinogen oxidase [Source:HGNC Symbol;Acc:2321] | |
| CPPED1 | Calcineurin-like phosphoesterase domain containing 1 [Source:HGNC Symbol;Acc:25632] | |
| CPSF2 | Cleavage and polyadenylation specific factor 2, 100kda [Source:HGNC Symbol;Acc:2325] | |
| CPSF4L | Cleavage and polyadenylation specific factor 4-like [Source:HGNC Symbol;Acc:33632] | |
| CPT1A | Carnitine palmitoyltransferase 1A (liver) [Source:HGNC Symbol;Acc:2328] | |
| CPT1B | Carnitine palmitoyltransferase 1B (muscle) [Source:HGNC Symbol;Acc:2329] | |
| CR1 | Complement component (3b/4b) receptor 1 (Knops blood group) [Source:HGNC Symbol;Acc:2334] | |

| | | |
|-------------------|--|---|
| CR1L | Complement component (3b/4b) receptor 1-like [Source:HGNC Symbol;Acc:2335] | |
| CR2 | Complement component (3d/Epstein Barr virus) receptor 2 [Source:HGNC Symbol;Acc:2336] | |
| CR381653.1 | | |
| CRAMP1L | Crm, cramped-like (Drosophila) [Source:HGNC Symbol;Acc:14122] | |
| CRAT | Carnitine O-acetyltransferase [Source:HGNC Symbol;Acc:2342] | |
| CRB1 | Crumbs homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:2343] | |
| CRB2 | Crumbs homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:18688] | |
| CRCP | CGRP receptor component [Source:HGNC Symbol;Acc:17888] | |
| CREB1 | cAMP responsive element binding protein 1 | √ |
| CREB3 | cAMP responsive element binding protein 3 [Source:HGNC Symbol;Acc:2347] | |
| CREB3L2 | cAMP responsive element binding protein 3-like 2 | √ |
| CREB5 | cAMP responsive element binding protein 5 [Source:HGNC Symbol;Acc:16844] | |
| CREG2 | Cellular repressor of E1A-stimulated genes 2 [Source:HGNC Symbol;Acc:14272] | |
| CRELD1 | Cysteine-rich with EGF-like domains 1 [Source:HGNC Symbol;Acc:14630] | |
| CRELD2 | Cysteine-rich with EGF-like domains 2 [Source:HGNC Symbol;Acc:28150] | |
| CRHR2 | Corticotropin releasing hormone receptor 2 [Source:HGNC Symbol;Acc:2358] | |
| CRIM1 | Cysteine rich transmembrane BMP regulator 1 (chordin-like) [Source:HGNC Symbol;Acc:2359] | |
| CRIPAK | Cysteine-rich PAK1 inhibitor [Source:HGNC Symbol;Acc:26619] | |
| CRISPLD2 | Cysteine-rich secretory protein LCCL domain containing 2 [Source:HGNC Symbol;Acc:25248] | |
| CRK | V-crk sarcoma virus CT10 oncogene homolog (avian) [Source:HGNC Symbol;Acc:2362] | |
| CRKL | V-crk sarcoma virus CT10 oncogene homolog (avian)-like [Source:HGNC Symbol;Acc:2363] | |
| CRLF3 | Cytokine receptor-like factor 3 [Source:HGNC Symbol;Acc:17177] | |
| CRLS1 | Cardiolipin synthase 1 [Source:HGNC Symbol;Acc:16148] | |

| | | |
|-------------------|--|---|
| CRMP1 | Collapsin response mediator protein 1 [Source:HGNC Symbol;Acc:2365] | |
| CROCC | Ciliary rootlet coiled-coil, rootletin [Source:HGNC Symbol;Acc:21299] | |
| CROT | Carnitine O-octanoyltransferase [Source:HGNC Symbol;Acc:2366] | |
| CRTC2 | CREB regulated transcription coactivator 2 [Source:HGNC Symbol;Acc:27301] | |
| CRTC3 | CREB regulated transcription coactivator 3 | √ |
| CRX | Cone-rod homeobox [Source:HGNC Symbol;Acc:2383] | |
| CRY2 | Cryptochrome 2 (photolyase-like) [Source:HGNC Symbol;Acc:2385] | |
| CRYBA2 | Crystallin, beta A2 [Source:HGNC Symbol;Acc:2395] | |
| CRYBB1 | Crystallin, beta B1 [Source:HGNC Symbol;Acc:2397] | |
| CRYGA | Crystallin, gamma A [Source:HGNC Symbol;Acc:2408] | |
| CRYGC | Crystallin, gamma C [Source:HGNC Symbol;Acc:2410] | |
| CRYGD | Crystallin, gamma D [Source:HGNC Symbol;Acc:2411] | |
| CRYM | Crystallin, mu [Source:HGNC Symbol;Acc:2418] | |
| CS | Citrate synthase [Source:HGNC Symbol;Acc:2422] | |
| CSAD | Cysteine sulfinic acid decarboxylase [Source:HGNC Symbol;Acc:18966] | |
| CSDC2 | Cold shock domain containing C2, RNA binding [Source:HGNC Symbol;Acc:30359] | |
| CSDE1 | Cold shock domain containing E1, RNA-binding [Source:HGNC Symbol;Acc:29905] | |
| CSF2RA | Colony stimulating factor 2 receptor, alpha, low-affinity (granulocyte-macrophage) [Source:HGNC Symbol;Acc:2435] | |
| CSF2RB | Colony stimulating factor 2 receptor, beta, low-affinity (granulocyte-macrophage) [Source:HGNC Symbol;Acc:2436] | |
| CSGALNACT2 | Chondroitin sulfate N-acetylgalactosaminyltransferase 2 [Source:HGNC Symbol;Acc:24292] | |
| CSMD1 | CUB and Sushi multiple domains 1 [Source:HGNC Symbol;Acc:14026] | |
| CSMD2 | CUB and Sushi multiple domains 2 [Source:HGNC Symbol;Acc:19290] | |
| CSNK1G1 | Casein kinase 1, gamma 1 [Source:HGNC Symbol;Acc:2454] | |
| CSNK1G3 | Casein kinase 1, gamma 3 [Source:HGNC Symbol;Acc:2456] | |
| CSPG4 | Chondroitin sulfate proteoglycan 4 [Source:HGNC Symbol;Acc:2466] | |
| CSRNP1 | Cysteine-serine-rich nuclear protein 1 [Source:HGNC Symbol;Acc:14300] | |
| CSRNP3 | Cysteine-serine-rich nuclear protein 3 [Source:HGNC Symbol;Acc:30729] | |

| | | |
|---------------------|--|---|
| CTB-25P15.2 | ANKHD1-EIF4EBP3 protein [Source:refseq peptide;Acc:NP_065741] | |
| CTBP1 | C-terminal binding protein 1 [Source:HGNC Symbol;Acc:2494] | |
| CTBP2 | C-terminal binding protein 2 [Source:HGNC Symbol;Acc:2495] | |
| CTC1 | CTS telomere maintenance complex component 1 [Source:HGNC Symbol;Acc:26169] | |
| CTCF | CCCTC-binding factor (zinc finger protein) [Source:HGNC Symbol;Acc:13723] | |
| CTCFL | CCCTC-binding factor (zinc finger protein)-like [Source:HGNC Symbol;Acc:16234] | |
| CTD-2170G1.1 | Uncharacterized protein FLJ37543 [Source:uniprotkb/Swiss-Prot;Acc:Q2M2E5] | |
| CTDSP2 | CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small phosphatase 2 [Source:HGNC Symbol;Acc:17077] | |
| CTDSPL | CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small phosphatase-like [Source:HGNC Symbol;Acc:16890] | |
| CTGF | Connective tissue growth factor [Source:HGNC Symbol;Acc:2500] | |
| CTHRC1 | Collagen triple helix repeat containing 1 [Source:HGNC Symbol;Acc:18831] | |
| CTNNB1 | Catenin (cadherin-associated protein), beta 1, 88 kDa | √ |
| CTNNBIP1 | Catenin, beta interacting protein 1 [Source:HGNC Symbol;Acc:16913] | |
| CTNNBL1 | Catenin, beta like 1 [Source:HGNC Symbol;Acc:15879] | |
| CTNND1 | Catenin (cadherin-associated protein), delta 1 [Source:HGNC Symbol;Acc:2515] | |
| CTNND2 | Catenin (cadherin-associated protein), delta 2 (neural plakophilin-related arm-repeat protein) [Source:HGNC Symbol;Acc:2516] | |
| CTPS2 | CTP synthase II [Source:HGNC Symbol;Acc:2520] | |
| CTSA | Cathepsin A [Source:HGNC Symbol;Acc:9251] | |
| CTSC | Cathepsin C [Source:HGNC Symbol;Acc:2528] | |
| CTSZ | Cathepsin Z [Source:HGNC Symbol;Acc:2547] | |
| CTTNBP2 | Cortactin binding protein 2 [Source:HGNC Symbol;Acc:15679] | |
| CTXN1 | Cortexin 1 [Source:HGNC Symbol;Acc:31108] | |
| CUBN | Cubilin (intrinsic factor-cobalamin receptor) [Source:HGNC Symbol;Acc:2548] | |
| CUEDC2 | CUE domain containing 2 [Source:HGNC Symbol;Acc:28352] | |

| | | |
|-----------------|---|---|
| CUL2 | Cullin 2 [Source:HGNC Symbol;Acc:2552] | |
| CUL3 | Cullin 3 [Source:HGNC Symbol;Acc:2553] | |
| CUL4B | Cullin 4B [Source:HGNC Symbol;Acc:2555] | |
| CUL7 | Cullin 7 [Source:HGNC Symbol;Acc:21024] | |
| CUX1 | Cut-like homeobox 1 [Source:HGNC Symbol;Acc:2557] | |
| CWC22 | CWC22 spliceosome-associated protein homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:29322] | |
| CWC27 | CWC27 spliceosome-associated protein homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:10664] | |
| CXCL5 | Chemokine (C-X-C motif) ligand 5 [Source:HGNC Symbol;Acc:10642] | |
| CXCL9 | Chemokine (C-X-C motif) ligand 9 [Source:HGNC Symbol;Acc:7098] | |
| CXCR4 | Chemokine (C-X-C motif) receptor 4 [Source:HGNC Symbol;Acc:2561] | |
| CXCR5 | Chemokine (C-X-C motif) receptor 5 [Source:HGNC Symbol;Acc:1060] | |
| CXCR6 | Chemokine (C-X-C motif) receptor 6 [Source:HGNC Symbol;Acc:16647] | |
| CXorf23 | Chromosome X open reading frame 23 [Source:HGNC Symbol;Acc:27413] | |
| CXorf26 | Chromosome X open reading frame 26 [Source:HGNC Symbol;Acc:28790] | |
| CXorf31 | Chromosome X open reading frame 31 [Source:HGNC Symbol;Acc:17986] | |
| CXorf36 | Chromosome X open reading frame 36 [Source:HGNC Symbol;Acc:25866] | |
| CXorf38 | Chromosome X open reading frame 38 [Source:HGNC Symbol;Acc:28589] | |
| CXorf40B | Chromosome X open reading frame 40B [Source:HGNC Symbol;Acc:17402] | |
| CXorf56 | Chromosome X open reading frame 56 [Source:HGNC Symbol;Acc:26239] | |
| CXorf57 | Chromosome X open reading frame 57 [Source:HGNC Symbol;Acc:25486] | |
| CXorf58 | Chromosome X open reading frame 58 [Source:HGNC Symbol;Acc:26356] | |
| CXXC4 | CXXC finger protein 4 [Source:HGNC Symbol;Acc:24593] | |
| CYB5B | Cytochrome b5 type B (outer mitochondrial membrane) [Source:HGNC Symbol;Acc:24374] | |
| CYB5D1 | Cytochrome b5 domain containing 1 [Source:HGNC Symbol;Acc:26516] | |
| CYB5R2 | Cytochrome b5 reductase 2 [Source:HGNC Symbol;Acc:24376] | |
| CYBRD1 | Cytochrome b reductase 1 [Source:HGNC Symbol;Acc:20797] | |
| CYLD | Cylindromatosis (turban tumor syndrome) | √ |
| CYP11A1 | Cytochrome P450, family 11, subfamily A, polypeptide 1 [Source:HGNC Symbol;Acc:2590] | |

| | | |
|-----------------|--|--|
| CYP11B2 | Cytochrome P450, family 11, subfamily B, polypeptide 2 [Source:HGNC Symbol;Acc:2592] | |
| CYP19A1 | Cytochrome P450, family 19, subfamily A, polypeptide 1 [Source:HGNC Symbol;Acc:2594] | |
| CYP2B6 | Cytochrome P450, family 2, subfamily B, polypeptide 6 [Source:HGNC Symbol;Acc:2615] | |
| CYP2C19 | Cytochrome P450, family 2, subfamily C, polypeptide 19 [Source:HGNC Symbol;Acc:2621] | |
| CYP2C8 | Cytochrome P450, family 2, subfamily C, polypeptide 8 [Source:HGNC Symbol;Acc:2622] | |
| CYP2D6 | Cytochrome P450, family 2, subfamily D, polypeptide 6 [Source:HGNC Symbol;Acc:2625] | |
| CYP2D7P1 | Cytochrome P450, family 2, subfamily D, polypeptide 7 pseudogene 1 [Source:HGNC Symbol;Acc:2624] | |
| CYP2R1 | Cytochrome P450, family 2, subfamily R, polypeptide 1 [Source:HGNC Symbol;Acc:20580] | |
| CYP2U1 | Cytochrome P450, family 2, subfamily U, polypeptide 1 [Source:HGNC Symbol;Acc:20582] | |
| CYP3A4 | Cytochrome P450, family 3, subfamily A, polypeptide 4 [Source:HGNC Symbol;Acc:2637] | |
| CYP3A43 | Cytochrome P450, family 3, subfamily A, polypeptide 43 [Source:HGNC Symbol;Acc:17450] | |
| CYP3A5 | Cytochrome P450, family 3, subfamily A, polypeptide 5 [Source:HGNC Symbol;Acc:2638] | |
| CYP3A7 | Cytochrome P450, family 3, subfamily A, polypeptide 7 [Source:HGNC Symbol;Acc:2640] | |
| CYP4A22 | Cytochrome P450, family 4, subfamily A, polypeptide 22 [Source:HGNC Symbol;Acc:20575] | |
| CYP4F12 | Cytochrome P450, family 4, subfamily F, polypeptide 12 [Source:HGNC Symbol;Acc:18857] | |
| CYP4F2 | Cytochrome P450, family 4, subfamily F, polypeptide 2 [Source:HGNC Symbol;Acc:2645] | |

| | | |
|-----------------|---|--|
| CYP4F8 | Cytochrome P450, family 4, subfamily F, polypeptide 8 [Source:HGNC Symbol;Acc:2648] | |
| CYP4Z1 | Cytochrome P450, family 4, subfamily Z, polypeptide 1 [Source:HGNC Symbol;Acc:20583] | |
| CYR61 | Cysteine-rich, angiogenic inducer, 61 [Source:HGNC Symbol;Acc:2654] | |
| CYSLTR2 | Cysteinyl leukotriene receptor 2 [Source:HGNC Symbol;Acc:18274] | |
| CYTH2 | Cytohesin 2 [Source:HGNC Symbol;Acc:9502] | |
| CYTH3 | Cytohesin 3 [Source:HGNC Symbol;Acc:9504] | |
| CYTH4 | Cytohesin 4 [Source:HGNC Symbol;Acc:9505] | |
| D2HGDH | D-2-hydroxyglutarate dehydrogenase [Source:HGNC Symbol;Acc:28358] | |
| D87023.1 | Immunoglobulin lambda-like polypeptide 5 [Source:refseq peptide;Acc:NP_001171597] | |
| DAAM1 | Dishevelled associated activator of morphogenesis 1 [Source:HGNC Symbol;Acc:18142] | |
| DAAM2 | Dishevelled associated activator of morphogenesis 2 [Source:HGNC Symbol;Acc:18143] | |
| DAB2IP | DAB2 interacting protein [Source:HGNC Symbol;Acc:17294] | |
| DACH2 | Dachshund homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:16814] | |
| DACT1 | Dapper, antagonist of beta-catenin, homolog 1 (Xenopus laevis) [Source:HGNC Symbol;Acc:17748] | |
| DAG1 | Dystroglycan 1 (dystrophin-associated glycoprotein 1) [Source:HGNC Symbol;Acc:2666] | |
| DAGLA | Diacylglycerol lipase, alpha [Source:HGNC Symbol;Acc:1165] | |
| DAGLB | Diacylglycerol lipase, beta [Source:HGNC Symbol;Acc:28923] | |
| DAPK1 | Death-associated protein kinase 1 [Source:HGNC Symbol;Acc:2674] | |
| DAPK2 | Death-associated protein kinase 2 [Source:HGNC Symbol;Acc:2675] | |
| DARC | Duffy blood group, chemokine receptor [Source:HGNC Symbol;Acc:4035] | |
| DAZ1 | Deleted in azoospermia 1 [Source:HGNC Symbol;Acc:2682] | |
| DAZ2 | Deleted in azoospermia 2 [Source:HGNC Symbol;Acc:15964] | |
| DAZ3 | Deleted in azoospermia 3 [Source:HGNC Symbol;Acc:15965] | |
| DAZ4 | Deleted in azoospermia 4 [Source:HGNC Symbol;Acc:15966] | |
| DBF4B | DBF4 homolog B (S. Cerevisiae) [Source:HGNC Symbol;Acc:17883] | |

| | | |
|----------------|---|--|
| DBNDD2 | Dysbindin (dystrobrevin binding protein 1) domain containing 2 [Source:HGNC Symbol;Acc:15881] | |
| DBNL | Drebrin-like [Source:HGNC Symbol;Acc:2696] | |
| DBP | D site of albumin promoter (albumin D-box) binding protein [Source:HGNC Symbol;Acc:2697] | |
| DBX2 | Developing brain homeobox 2 [Source:HGNC Symbol;Acc:33186] | |
| DCAF11 | DDB1 and CUL4 associated factor 11 [Source:HGNC Symbol;Acc:20258] | |
| DCAF4 | DDB1 and CUL4 associated factor 4 [Source:HGNC Symbol;Acc:20229] | |
| DCAF4L1 | DDB1 and CUL4 associated factor 4-like 1 [Source:HGNC Symbol;Acc:27723] | |
| DCAF7 | DDB1 and CUL4 associated factor 7 [Source:HGNC Symbol;Acc:30915] | |
| DCBLD1 | Discoidin, CUB and LCCL domain containing 1 [Source:HGNC Symbol;Acc:21479] | |
| DCC | Deleted in colorectal carcinoma [Source:HGNC Symbol;Acc:2701] | |
| DCDC1 | Doublecortin domain containing 1 [Source:HGNC Symbol;Acc:20625] | |
| DCDC5 | Doublecortin domain containing 5 [Source:HGNC Symbol;Acc:24799] | |
| DCHS1 | Dachsous 1 (Drosophila) [Source:HGNC Symbol;Acc:13681] | |
| DCHS2 | Dachsous 2 (Drosophila) [Source:HGNC Symbol;Acc:23111] | |
| DCI | Dodecenoyl-coa isomerase [Source:HGNC Symbol;Acc:2703] | |
| DCK | Deoxycytidine kinase [Source:HGNC Symbol;Acc:2704] | |
| DCLK1 | Doublecortin-like kinase 1 [Source:HGNC Symbol;Acc:2700] | |
| DCLRE1A | DNA cross-link repair 1A [Source:HGNC Symbol;Acc:17660] | |
| DCLRE1C | DNA cross-link repair 1C [Source:HGNC Symbol;Acc:17642] | |
| DCN | Decorin [Source:HGNC Symbol;Acc:2705] | |
| DCT | Dopachrome tautomerase (dopachrome delta-isomerase, tyrosine-related protein 2) [Source:HGNC Symbol;Acc:2709] | |
| DCTD | Dcmp deaminase [Source:HGNC Symbol;Acc:2710] | |
| DCTN1 | Dynactin 1 [Source:HGNC Symbol;Acc:2711] | |
| DCTN3 | Dynactin 3 (p22) [Source:HGNC Symbol;Acc:2713] | |
| DCUN1D1 | DCN1, defective in cullin neddylation 1, domain containing 1 (S. Cerevisiae) [Source:HGNC Symbol;Acc:18184] | |
| DCUN1D2 | DCN1, defective in cullin neddylation 1, domain containing 2 (S. Cerevisiae) [Source:HGNC Symbol;Acc:20328] | |

| | | |
|----------------|---|--|
| DCUN1D3 | DCN1, defective in cullin neddylation 1, domain containing 3 (S. Cerevisiae) [Source:HGNC Symbol;Acc:28734] | |
| DCUN1D4 | DCN1, defective in cullin neddylation 1, domain containing 4 (S. Cerevisiae) [Source:HGNC Symbol;Acc:28998] | |
| DDA1 | DET1 and DDB1 associated 1 [Source:HGNC Symbol;Acc:28360] | |
| DDAH1 | Dimethylarginine dimethylaminohydrolase 1 [Source:HGNC Symbol;Acc:2715] | |
| DDB1 | Damage-specific DNA binding protein 1, 127kda [Source:HGNC Symbol;Acc:2717] | |
| DDI1 | DNA-damage inducible 1 homolog 1 (S. Cerevisiae) [Source:HGNC Symbol;Acc:18961] | |
| DDI2 | DNA-damage inducible 1 homolog 2 (S. Cerevisiae) [Source:HGNC Symbol;Acc:24578] | |
| DDIT4L | DNA-damage-inducible transcript 4-like [Source:HGNC Symbol;Acc:30555] | |
| DDN | Dendrin [Source:HGNC Symbol;Acc:24458] | |
| DDR1 | Discoidin domain receptor tyrosine kinase 1 [Source:HGNC Symbol;Acc:2730] | |
| DDR2 | Discoidin domain receptor tyrosine kinase 2 [Source:HGNC Symbol;Acc:2731] | |
| DDX1 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 1 [Source:HGNC Symbol;Acc:2734] | |
| DDX11 | DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 [Source:HGNC Symbol;Acc:2736] | |
| DDX17 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 17 [Source:HGNC Symbol;Acc:2740] | |
| DDX19A | DEAD (Asp-Glu-Ala-As) box polypeptide 19A [Source:HGNC Symbol;Acc:25628] | |
| DDX27 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 27 [Source:HGNC Symbol;Acc:15837] | |
| DDX39A | DEAD (Asp-Glu-Ala-Asp) box polypeptide 39A [Source:HGNC Symbol;Acc:17821] | |

| | | |
|----------------|---|---|
| DDX39B | DEAD (Asp-Glu-Ala-Asp) box polypeptide 39B [Source:HGNC Symbol;Acc:13917] | |
| DDX3X | DEAD (Asp-Glu-Ala-Asp) box polypeptide 3, X-linked [Source:HGNC Symbol;Acc:2745] | |
| DDX3Y | DEAD (Asp-Glu-Ala-Asp) box polypeptide 3, Y-linked [Source:HGNC Symbol;Acc:2699] | |
| DDX43 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 43 [Source:HGNC Symbol;Acc:18677] | |
| DDX47 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 47 [Source:HGNC Symbol;Acc:18682] | |
| DDX5 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 5 | √ |
| DDX51 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 51 [Source:HGNC Symbol;Acc:20082] | |
| DDX52 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 52 [Source:HGNC Symbol;Acc:20038] | |
| DDX53 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 53 [Source:HGNC Symbol;Acc:20083] | |
| DDX59 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 59 [Source:HGNC Symbol;Acc:25360] | |
| DECR1 | 2,4-dienoyl coa reductase 1, mitochondrial [Source:HGNC Symbol;Acc:2753] | |
| DEDD | Death effector domain containing [Source:HGNC Symbol;Acc:2755] | |
| DEF6 | Differentially expressed in FDCP 6 homolog (mouse) [Source:HGNC Symbol;Acc:2760] | |
| DEF8 | Differentially expressed in FDCP 8 homolog (mouse) [Source:HGNC Symbol;Acc:25969] | |
| DEFB119 | Defensin, beta 119 [Source:HGNC Symbol;Acc:18099] | |
| DEGS1 | Degenerative spermatocyte homolog 1, lipid desaturase (Drosophila) [Source:HGNC Symbol;Acc:13709] | |
| DENND2C | DENN/MADD domain containing 2C [Source:HGNC Symbol;Acc:24748] | |
| DENND3 | DENN/MADD domain containing 3 [Source:HGNC Symbol;Acc:29134] | |
| DENND4A | DENN/MADD domain containing 4A [Source:HGNC Symbol;Acc:24321] | |
| DENND4B | DENN/MADD domain containing 4B [Source:HGNC Symbol;Acc:29044] | |

| | | |
|----------------|---|--|
| DENND5A | DENN/MADD domain containing 5A [Source:HGNC Symbol;Acc:19344] | |
| DENND5B | DENN/MADD domain containing 5B [Source:HGNC Symbol;Acc:28338] | |
| DET1 | De-etiolated homolog 1 (Arabidopsis) [Source:HGNC Symbol;Acc:25477] | |
| DEXI | Dexi homolog (mouse) [Source:HGNC Symbol;Acc:13267] | |
| DFNA5 | Deafness, autosomal dominant 5 [Source:HGNC Symbol;Acc:2810] | |
| DFNB59 | Deafness, autosomal recessive 59 [Source:HGNC Symbol;Acc:29502] | |
| DGCR8 | Digeorge syndrome critical region gene 8 [Source:HGNC Symbol;Acc:2847] | |
| DGKA | Diacylglycerol kinase, alpha 80kda [Source:HGNC Symbol;Acc:2849] | |
| DGKB | Diacylglycerol kinase, beta 90kda [Source:HGNC Symbol;Acc:2850] | |
| DGKD | Diacylglycerol kinase, delta 130kda [Source:HGNC Symbol;Acc:2851] | |
| DGKG | Diacylglycerol kinase, gamma 90kda [Source:HGNC Symbol;Acc:2853] | |
| DGKH | Diacylglycerol kinase, eta [Source:HGNC Symbol;Acc:2854] | |
| DGKQ | Diacylglycerol kinase, theta 110kda [Source:HGNC Symbol;Acc:2856] | |
| DGKZ | Diacylglycerol kinase, zeta [Source:HGNC Symbol;Acc:2857] | |
| DGUOK | Deoxyguanosine kinase [Source:HGNC Symbol;Acc:2858] | |
| DHODH | Dihydroorotate dehydrogenase [Source:HGNC Symbol;Acc:2867] | |
| DHRS1 | Dehydrogenase/reductase (SDR family) member 1 [Source:HGNC Symbol;Acc:16445] | |
| DHRS11 | Dehydrogenase/reductase (SDR family) member 11 [Source:HGNC Symbol;Acc:28639] | |
| DHRS2 | Dehydrogenase/reductase (SDR family) member 2 [Source:HGNC Symbol;Acc:18349] | |
| DHRS3 | Dehydrogenase/reductase (SDR family) member 3 [Source:HGNC Symbol;Acc:17693] | |
| DHRS4 | Dehydrogenase/reductase (SDR family) member 4 [Source:HGNC Symbol;Acc:16985] | |
| DHRS4L2 | Dehydrogenase/reductase (SDR family) member 4 like 2 [Source:HGNC Symbol;Acc:19731] | |
| DHTKD1 | Dehydrogenase E1 and transketolase domain containing 1 [Source:HGNC Symbol;Acc:23537] | |
| DHX16 | DEAH (Asp-Glu-Ala-His) box polypeptide 16 [Source:HGNC Symbol;Acc:2739] | |

| | | |
|---------------|--|---|
| DHX35 | DEAH (Asp-Glu-Ala-His) box polypeptide 35 [Source:HGNC Symbol;Acc:15861] | |
| DHX38 | DEAH (Asp-Glu-Ala-His) box polypeptide 38 [Source:HGNC Symbol;Acc:17211] | |
| DHX58 | DEXH (Asp-Glu-X-His) box polypeptide 58 [Source:HGNC Symbol;Acc:29517] | |
| DHX8 | DEAH (Asp-Glu-Ala-His) box polypeptide 8 [Source:HGNC Symbol;Acc:2749] | |
| DIABLO | Diablo homolog (Drosophila) [Source:HGNC Symbol;Acc:21528] | |
| DIAPH2 | Diaphanous homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:2877] | |
| DIAPH3 | Diaphanous homolog 3 (Drosophila) [Source:HGNC Symbol;Acc:15480] | |
| DICER1 | Dicer 1, ribonuclease type III | √ |
| DIDO1 | Death inducer-obliterator 1 [Source:HGNC Symbol;Acc:2680] | |
| DIEXF | Digestive organ expansion factor homolog (zebrafish) [Source:HGNC Symbol;Acc:28440] | |
| DIO3 | Deiodinase, iodothyronine, type III [Source:HGNC Symbol;Acc:2885] | |
| DIP2B | DIP2 disco-interacting protein 2 homolog B (Drosophila) [Source:HGNC Symbol;Acc:29284] | |
| DIP2C | DIP2 disco-interacting protein 2 homolog C (Drosophila) [Source:HGNC Symbol;Acc:29150] | |
| DIRAS1 | DIRAS family, GTP-binding RAS-like 1 [Source:HGNC Symbol;Acc:19127] | |
| DIS3L | DIS3 mitotic control homolog (S. Cerevisiae)-like [Source:HGNC Symbol;Acc:28698] | |
| DISC1 | Disrupted in schizophrenia 1 [Source:HGNC Symbol;Acc:2888] | |
| DISP2 | Dispatched homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:19712] | |
| DKC1 | Dyskeratosis congenita 1, dyskerin [Source:HGNC Symbol;Acc:2890] | |
| DLAT | Dihydrolipoamide S-acetyltransferase [Source:HGNC Symbol;Acc:2896] | |
| DLC1 | Deleted in liver cancer 1 [Source:HGNC Symbol;Acc:2897] | |
| DLEC1 | Deleted in lung and esophageal cancer 1 [Source:HGNC Symbol;Acc:2899] | |
| DLEU7 | Deleted in lymphocytic leukemia, 7 [Source:HGNC Symbol;Acc:17567] | |
| DLG2 | Discs, large homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:2901] | |
| DLG3 | Discs, large homolog 3 (Drosophila) [Source:HGNC Symbol;Acc:2902] | |

| | | |
|---------------|---|--|
| DLG5 | Discs, large homolog 5 (Drosophila) [Source:HGNC Symbol;Acc:2904] | |
| DLGAP1 | Discs, large (Drosophila) homolog-associated protein 1 [Source:HGNC Symbol;Acc:2905] | |
| DLGAP2 | Discs, large (Drosophila) homolog-associated protein 2 [Source:HGNC Symbol;Acc:2906] | |
| DLGAP5 | Discs, large (Drosophila) homolog-associated protein 5 [Source:HGNC Symbol;Acc:16864] | |
| DLK1 | Delta-like 1 homolog (Drosophila) [Source:HGNC Symbol;Acc:2907] | |
| DLL1 | Delta-like 1 (Drosophila) [Source:HGNC Symbol;Acc:2908] | |
| DLL3 | Delta-like 3 (Drosophila) [Source:HGNC Symbol;Acc:2909] | |
| DLX4 | Distal-less homeobox 4 [Source:HGNC Symbol;Acc:2917] | |
| DLX5 | Distal-less homeobox 5 [Source:HGNC Symbol;Acc:2918] | |
| DMD | Dystrophin [Source:HGNC Symbol;Acc:2928] | |
| DMGDH | Dimethylglycine dehydrogenase [Source:HGNC Symbol;Acc:24475] | |
| DMRT1 | Doublesex and mab-3 related transcription factor 1 [Source:HGNC Symbol;Acc:2934] | |
| DMRT3 | Doublesex and mab-3 related transcription factor 3 [Source:HGNC Symbol;Acc:13909] | |
| DMRTA2 | DMRT-like family A2 [Source:HGNC Symbol;Acc:13908] | |
| DMRTC2 | DMRT-like family C2 [Source:HGNC Symbol;Acc:13911] | |
| DMXL1 | Dmx-like 1 [Source:HGNC Symbol;Acc:2937] | |
| DMXL2 | Dmx-like 2 [Source:HGNC Symbol;Acc:2938] | |
| DNAH10 | Dynein, axonemal, heavy chain 10 [Source:HGNC Symbol;Acc:2941] | |
| DNAH11 | Dynein, axonemal, heavy chain 11 [Source:HGNC Symbol;Acc:2942] | |
| DNAH12 | Dynein, axonemal, heavy chain 12 [Source:HGNC Symbol;Acc:2943] | |
| DNAH14 | Dynein, axonemal, heavy chain 14 [Source:HGNC Symbol;Acc:2945] | |
| DNAH17 | Dynein, axonemal, heavy chain 17 [Source:HGNC Symbol;Acc:2946] | |
| DNAH2 | Dynein, axonemal, heavy chain 2 [Source:HGNC Symbol;Acc:2948] | |
| DNAH3 | Dynein, axonemal, heavy chain 3 [Source:HGNC Symbol;Acc:2949] | |
| DNAH5 | Dynein, axonemal, heavy chain 5 [Source:HGNC Symbol;Acc:2950] | |
| DNAH6 | Dynein, axonemal, heavy chain 6 [Source:HGNC Symbol;Acc:2951] | |
| DNAH7 | Dynein, axonemal, heavy chain 7 [Source:HGNC Symbol;Acc:18661] | |
| DNAH8 | Dynein, axonemal, heavy chain 8 [Source:HGNC Symbol;Acc:2952] | |

| | | |
|----------------|---|--|
| DNAH9 | Dynein, axonemal, heavy chain 9 [Source:HGNC Symbol;Acc:2953] | |
| DNAJB1 | Dnaj (Hsp40) homolog, subfamily B, member 1 [Source:HGNC Symbol;Acc:5270] | |
| DNAJB12 | Dnaj (Hsp40) homolog, subfamily B, member 12 [Source:HGNC Symbol;Acc:14891] | |
| DNAJB13 | Dnaj (Hsp40) homolog, subfamily B, member 13 [Source:HGNC Symbol;Acc:30718] | |
| DNAJB2 | Dnaj (Hsp40) homolog, subfamily B, member 2 [Source:HGNC Symbol;Acc:5228] | |
| DNAJB4 | Dnaj (Hsp40) homolog, subfamily B, member 4 [Source:HGNC Symbol;Acc:14886] | |
| DNAJB7 | Dnaj (Hsp40) homolog, subfamily B, member 7 [Source:HGNC Symbol;Acc:24986] | |
| DNAJC1 | Dnaj (Hsp40) homolog, subfamily C, member 1 [Source:HGNC Symbol;Acc:20090] | |
| DNAJC10 | Dnaj (Hsp40) homolog, subfamily C, member 10 [Source:HGNC Symbol;Acc:24637] | |
| DNAJC14 | Dnaj (Hsp40) homolog, subfamily C, member 14 [Source:HGNC Symbol;Acc:24581] | |
| DNAJC15 | Dnaj (Hsp40) homolog, subfamily C, member 15 [Source:HGNC Symbol;Acc:20325] | |
| DNAJC2 | Dnaj (Hsp40) homolog, subfamily C, member 2 [Source:HGNC Symbol;Acc:13192] | |
| DNAJC27 | Dnaj (Hsp40) homolog, subfamily C, member 27 [Source:HGNC Symbol;Acc:30290] | |
| DNAJC3 | Dnaj (Hsp40) homolog, subfamily C, member 3 [Source:HGNC Symbol;Acc:9439] | |
| DNAJC6 | Dnaj (Hsp40) homolog, subfamily C, member 6 [Source:HGNC Symbol;Acc:15469] | |
| DNAJC7 | Dnaj (Hsp40) homolog, subfamily C, member 7 [Source:HGNC Symbol;Acc:12392] | |
| DNASE2 | Deoxyribonuclease II, lysosomal [Source:HGNC Symbol;Acc:2960] | |
| DNER | Delta/notch-like EGF repeat containing [Source:HGNC Symbol;Acc:24456] | |

| | | |
|----------------|---|---|
| DNHD1 | Dynein heavy chain domain 1 [Source:HGNC Symbol;Acc:26532] | |
| DNLZ | DNL-type zinc finger [Source:HGNC Symbol;Acc:33879] | |
| DNM2 | Dynamamin 2 | √ |
| DNMBP | Dynamamin binding protein [Source:HGNC Symbol;Acc:30373] | |
| DNMT1 | DNA (cytosine-5-)-methyltransferase 1 [Source:HGNC Symbol;Acc:2976] | |
| DNMT3A | DNA (cytosine-5-)-methyltransferase 3 alpha | √ |
| DNTTIP1 | Deoxynucleotidyltransferase, terminal, interacting protein 1 [Source:HGNC Symbol;Acc:16160] | |
| DNTTIP2 | Deoxynucleotidyltransferase, terminal, interacting protein 2 [Source:HGNC Symbol;Acc:24013] | |
| DOCK1 | Dedicator of cytokinesis 1 [Source:HGNC Symbol;Acc:2987] | |
| DOCK10 | Dedicator of cytokinesis 10 [Source:HGNC Symbol;Acc:23479] | |
| DOCK2 | Dedicator of cytokinesis 2 [Source:HGNC Symbol;Acc:2988] | |
| DOCK4 | Dedicator of cytokinesis 4 [Source:HGNC Symbol;Acc:19192] | |
| DOCK6 | Dedicator of cytokinesis 6 [Source:HGNC Symbol;Acc:19189] | |
| DOCK7 | Dedicator of cytokinesis 7 [Source:HGNC Symbol;Acc:19190] | |
| DOCK8 | Dedicator of cytokinesis 8 [Source:HGNC Symbol;Acc:19191] | |
| DOCK9 | Dedicator of cytokinesis 9 [Source:HGNC Symbol;Acc:14132] | |
| DOK1 | Docking protein 1, 62kda (downstream of tyrosine kinase 1) [Source:HGNC Symbol;Acc:2990] | |
| DOK5 | Docking protein 5 [Source:HGNC Symbol;Acc:16173] | |
| DOLK | Dolichol kinase [Source:HGNC Symbol;Acc:23406] | |
| DOPEY1 | Dopey family member 1 [Source:HGNC Symbol;Acc:21194] | |
| DOT1L | DOT1-like, histone H3 methyltransferase (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:24948] | |
| DPAGT1 | Dolichyl-phosphate (UDP-N-acetylglucosamine) N-acetylglucosaminophosphotransferase 1 (glcnac-1-P transferase) [Source:HGNC Symbol;Acc:2995] | |
| DPEP1 | Dipeptidase 1 (renal) [Source:HGNC Symbol;Acc:3002] | |
| DPEP2 | Dipeptidase 2 [Source:HGNC Symbol;Acc:23028] | |
| DPEP3 | Dipeptidase 3 [Source:HGNC Symbol;Acc:23029] | |
| DPH1 | DPH1 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:3003] | |
| DPH2 | DPH2 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:3004] | |

| | | |
|----------------|--|--|
| DPH3 | DPH3, KTI11 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:27717] | |
| DPP10 | Dipeptidyl-peptidase 10 (non-functional) [Source:HGNC Symbol;Acc:20823] | |
| DPP6 | Dipeptidyl-peptidase 6 [Source:HGNC Symbol;Acc:3010] | |
| DPP8 | Dipeptidyl-peptidase 8 [Source:HGNC Symbol;Acc:16490] | |
| DPY19L1 | Dpy-19-like 1 (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:22205] | |
| DPY19L4 | Dpy-19-like 4 (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:27829] | |
| DPYD | Dihydropyrimidine dehydrogenase [Source:HGNC Symbol;Acc:3012] | |
| DPYSL3 | Dihydropyrimidinase-like 3 [Source:HGNC Symbol;Acc:3015] | |
| DPYSL4 | Dihydropyrimidinase-like 4 [Source:HGNC Symbol;Acc:3016] | |
| DQX1 | DEAQ box RNA-dependent atpase 1 [Source:HGNC Symbol;Acc:20410] | |
| DR1 | Down-regulator of transcription 1, TBP-binding (negative cofactor 2) [Source:HGNC Symbol;Acc:3017] | |
| DRAM1 | DNA-damage regulated autophagy modulator 1 [Source:HGNC Symbol;Acc:25645] | |
| DRAM2 | DNA-damage regulated autophagy modulator 2 [Source:HGNC Symbol;Acc:28769] | |
| DRGX | Dorsal root ganglia homeobox [Source:HGNC Symbol;Acc:21536] | |
| DROSHA | Drosha, ribonuclease type III [Source:HGNC Symbol;Acc:17904] | |
| DRP2 | Dystrophin related protein 2 [Source:HGNC Symbol;Acc:3032] | |
| DSCAM | Down syndrome cell adhesion molecule [Source:HGNC Symbol;Acc:3039] | |
| DSCC1 | Defective in sister chromatid cohesion 1 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:24453] | |
| DSCR3 | Down syndrome critical region gene 3 [Source:HGNC Symbol;Acc:3044] | |
| DSEL | Dermatan sulfate epimerase-like [Source:HGNC Symbol;Acc:18144] | |
| DSG1 | Desmoglein 1 [Source:HGNC Symbol;Acc:3048] | |
| DSG2 | Desmoglein 2 [Source:HGNC Symbol;Acc:3049] | |
| DSG4 | Desmoglein 4 [Source:HGNC Symbol;Acc:21307] | |
| DST | Dystonin [Source:HGNC Symbol;Acc:1090] | |
| DSTYK | Dual serine/threonine and tyrosine protein kinase [Source:HGNC Symbol;Acc:29043] | |
| DTHD1 | Death domain containing 1 [Source:HGNC Symbol;Acc:37261] | |
| DTL | Denticleless homolog (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:30288] | |

| | | |
|-----------------|--|--|
| DTNA | Dystrobrevin, alpha [Source:HGNC Symbol;Acc:3057] | |
| DTX3L | Deltex 3-like (Drosophila) [Source:HGNC Symbol;Acc:30323] | |
| DTX4 | Deltex homolog 4 (Drosophila) [Source:HGNC Symbol;Acc:29151] | |
| DUOXA1 | Dual oxidase maturation factor 1 [Source:HGNC Symbol;Acc:26507] | |
| DUOXA2 | Dual oxidase maturation factor 2 [Source:HGNC Symbol;Acc:32698] | |
| DUSP12 | Dual specificity phosphatase 12 [Source:HGNC Symbol;Acc:3067] | |
| DUSP27 | Dual specificity phosphatase 27 (putative) [Source:HGNC Symbol;Acc:25034] | |
| DUSP28 | Dual specificity phosphatase 28 [Source:HGNC Symbol;Acc:33237] | |
| DUSP5 | Dual specificity phosphatase 5 [Source:HGNC Symbol;Acc:3071] | |
| DUSP7 | Dual specificity phosphatase 7 [Source:HGNC Symbol;Acc:3073] | |
| DVL1 | Dishevelled, dsh homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:3084] | |
| DYNC1H1 | Dynein, cytoplasmic 1, heavy chain 1 [Source:HGNC Symbol;Acc:2961] | |
| DYNC1LI2 | Dynein, cytoplasmic 1, light intermediate chain 2 [Source:HGNC Symbol;Acc:2966] | |
| DYNC2H1 | Dynein, cytoplasmic 2, heavy chain 1 [Source:HGNC Symbol;Acc:2962] | |
| DYSF | Dysferlin, limb girdle muscular dystrophy 2B (autosomal recessive) [Source:HGNC Symbol;Acc:3097] | |
| DYX1C1 | Dyslexia susceptibility 1 candidate 1 [Source:HGNC Symbol;Acc:21493] | |
| DZIP1 | DAZ interacting protein 1 [Source:HGNC Symbol;Acc:20908] | |
| DZIP3 | DAZ interacting protein 3, zinc finger [Source:HGNC Symbol;Acc:30938] | |
| E2F4 | E2F transcription factor 4, p107/p130-binding [Source:HGNC Symbol;Acc:3118] | |
| E2F5 | E2F transcription factor 5, p130-binding [Source:HGNC Symbol;Acc:3119] | |
| EARS2 | Glutamyl-trna synthetase 2, mitochondrial (putative) [Source:HGNC Symbol;Acc:29419] | |
| EBF2 | Early B-cell factor 2 [Source:HGNC Symbol;Acc:19090] | |
| EBPL | Emopamil binding protein-like [Source:HGNC Symbol;Acc:18061] | |
| ECE2 | Endothelin converting enzyme 2 [Source:HGNC Symbol;Acc:13275] | |
| ECHDC1 | Enoyl coa hydratase domain containing 1 [Source:HGNC Symbol;Acc:21489] | |
| ECHDC2 | Enoyl coa hydratase domain containing 2 [Source:HGNC Symbol;Acc:23408] | |

| | | |
|----------------|---|---|
| ECM2 | Extracellular matrix protein 2, female organ and adipocyte specific [Source:HGNC Symbol;Acc:3154] | |
| ECSIT | ECSIT homolog (Drosophila) [Source:HGNC Symbol;Acc:29548] | |
| ECT2L | Epithelial cell transforming sequence 2 oncogene-like | √ |
| EDAR | Ectodysplasin A receptor [Source:HGNC Symbol;Acc:2895] | |
| EDARADD | EDAR-associated death domain [Source:HGNC Symbol;Acc:14341] | |
| EDC4 | Enhancer of mrna decapping 4 [Source:HGNC Symbol;Acc:17157] | |
| EDEM2 | ER degradation enhancer, mannosidase alpha-like 2 [Source:HGNC Symbol;Acc:15877] | |
| EDEM3 | ER degradation enhancer, mannosidase alpha-like 3 [Source:HGNC Symbol;Acc:16787] | |
| EDN3 | Endothelin 3 [Source:HGNC Symbol;Acc:3178] | |
| EDNRA | Endothelin receptor type A [Source:HGNC Symbol;Acc:3179] | |
| EDNRB | Endothelin receptor type B [Source:HGNC Symbol;Acc:3180] | |
| EEA1 | Early endosome antigen 1 [Source:HGNC Symbol;Acc:3185] | |
| EEF1A1 | Eukaryotic translation elongation factor 1 alpha 1 [Source:HGNC Symbol;Acc:3189] | |
| EEF1A2 | Eukaryotic translation elongation factor 1 alpha 2 [Source:HGNC Symbol;Acc:3192] | |
| EEF1G | Eukaryotic translation elongation factor 1 gamma [Source:HGNC Symbol;Acc:3213] | |
| EEF2 | Eukaryotic translation elongation factor 2 [Source:HGNC Symbol;Acc:3214] | |
| EEPD1 | Endonuclease/exonuclease/phosphatase family domain containing 1 [Source:HGNC Symbol;Acc:22223] | |
| EFCAB2 | EF-hand calcium binding domain 2 [Source:HGNC Symbol;Acc:28166] | |
| EFCAB3 | EF-hand calcium binding domain 3 [Source:HGNC Symbol;Acc:26379] | |
| EFCAB4B | EF-hand calcium binding domain 4B [Source:HGNC Symbol;Acc:28657] | |
| EFCAB5 | EF-hand calcium binding domain 5 [Source:HGNC Symbol;Acc:24801] | |
| EFCAB6 | EF-hand calcium binding domain 6 [Source:HGNC Symbol;Acc:24204] | |
| EFCAB8 | EF-hand calcium binding domain 8 [Source:HGNC Symbol;Acc:34532] | |
| EFEMP1 | EGF containing fibulin-like extracellular matrix protein 1 [Source:HGNC Symbol;Acc:3218] | |

| | | |
|----------------|---|---|
| EFEMP2 | EGF containing fibulin-like extracellular matrix protein 2 [Source:HGNC Symbol;Acc:3219] | |
| EFHA1 | EF-hand domain family, member A1 [Source:HGNC Symbol;Acc:31830] | |
| EFHB | EF-hand domain family, member B [Source:HGNC Symbol;Acc:26330] | |
| EFNA5 | Ephrin-A5 [Source:HGNC Symbol;Acc:3225] | |
| EFR3B | EFR3 homolog B (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:29155] | |
| EFTUD1 | Elongation factor Tu GTP binding domain containing 1 [Source:HGNC Symbol;Acc:25789] | |
| EGF | Epidermal growth factor [Source:HGNC Symbol;Acc:3229] | |
| EGFL7 | EGF-like-domain, multiple 7 [Source:HGNC Symbol;Acc:20594] | |
| EGFLAM | EGF-like, fibronectin type III and laminin G domains [Source:HGNC Symbol;Acc:26810] | |
| EGFR | Epidermal growth factor receptor | √ |
| EGLN1 | Egl nine homolog 1 (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:1232] | |
| EGLN2 | Egl nine homolog 2 (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:14660] | |
| EGR1 | Early growth response 1 [Source:HGNC Symbol;Acc:3238] | |
| EGR3 | Early growth response 3 [Source:HGNC Symbol;Acc:3240] | |
| EGR4 | Early growth response 4 [Source:HGNC Symbol;Acc:3241] | |
| EHD1 | EH-domain containing 1 [Source:HGNC Symbol;Acc:3242] | |
| EHD4 | EH-domain containing 4 [Source:HGNC Symbol;Acc:3245] | |
| EHF | Ets homologous factor [Source:HGNC Symbol;Acc:3246] | |
| EHHADH | Enoyl-coa, hydratase/3-hydroxyacyl coa dehydrogenase [Source:HGNC Symbol;Acc:3247] | |
| EHMT2 | Euchromatic histone-lysine N-methyltransferase 2 [Source:HGNC Symbol;Acc:14129] | |
| EI24 | Etoposide induced 2.4 mrna [Source:HGNC Symbol;Acc:13276] | |
| EIF2AK1 | Eukaryotic translation initiation factor 2-alpha kinase 1 [Source:HGNC Symbol;Acc:24921] | |
| EIF2B1 | Eukaryotic translation initiation factor 2B, subunit 1 alpha, 26kda [Source:HGNC Symbol;Acc:3257] | |
| EIF2C1 | Eukaryotic translation initiation factor 2C, 1 [Source:HGNC Symbol;Acc:3262] | |

| | | |
|---------------|--|--|
| EIF2C3 | Eukaryotic translation initiation factor 2C, 3 [Source:HGNC Symbol;Acc:18421] | |
| EIF2C4 | Eukaryotic translation initiation factor 2C, 4 [Source:HGNC Symbol;Acc:18424] | |
| EIF2S1 | Eukaryotic translation initiation factor 2, subunit 1 alpha, 35kda [Source:HGNC Symbol;Acc:3265] | |
| EIF2S3 | Eukaryotic translation initiation factor 2, subunit 3 gamma, 52kda [Source:HGNC Symbol;Acc:3267] | |
| EIF3E | Eukaryotic translation initiation factor 3, subunit E [Source:HGNC Symbol;Acc:3277] | |
| EIF3F | Eukaryotic translation initiation factor 3, subunit F [Source:HGNC Symbol;Acc:3275] | |
| EIF3H | Eukaryotic translation initiation factor 3, subunit H [Source:HGNC Symbol;Acc:3273] | |
| EIF3I | Eukaryotic translation initiation factor 3, subunit I [Source:HGNC Symbol;Acc:3272] | |
| EIF3K | Eukaryotic translation initiation factor 3, subunit K [Source:HGNC Symbol;Acc:24656] | |
| EIF3L | Eukaryotic translation initiation factor 3, subunit L [Source:HGNC Symbol;Acc:18138] | |
| EIF4A3 | Eukaryotic translation initiation factor 4A3 [Source:HGNC Symbol;Acc:18683] | |
| EIF4B | Eukaryotic translation initiation factor 4B [Source:HGNC Symbol;Acc:3285] | |
| EIF4E | Eukaryotic translation initiation factor 4E [Source:HGNC Symbol;Acc:3287] | |
| EIF4E2 | Eukaryotic translation initiation factor 4E family member 2 [Source:HGNC Symbol;Acc:3293] | |
| EIF4E3 | Eukaryotic translation initiation factor 4E family member 3 [Source:HGNC Symbol;Acc:31837] | |
| EIF4G1 | Eukaryotic translation initiation factor 4 gamma, 1 [Source:HGNC Symbol;Acc:3296] | |
| EIF4G3 | Eukaryotic translation initiation factor 4 gamma, 3 [Source:HGNC Symbol;Acc:3298] | |

| | | |
|---------------|---|---|
| EIF4H | Eukaryotic translation initiation factor 4H [Source:HGNC Symbol;Acc:12741] | |
| EIF5 | Eukaryotic translation initiation factor 5 [Source:HGNC Symbol;Acc:3299] | |
| EIF5A2 | Eukaryotic translation initiation factor 5A2 [Source:HGNC Symbol;Acc:3301] | |
| EIF6 | Eukaryotic translation initiation factor 6 [Source:HGNC Symbol;Acc:6159] | |
| ELANE | Elastase, neutrophil expressed [Source:HGNC Symbol;Acc:3309] | |
| ELAVL1 | ELAV (embryonic lethal, abnormal vision, Drosophila)-like 1 (Hu antigen R) [Source:HGNC Symbol;Acc:3312] | |
| ELAVL2 | ELAV (embryonic lethal, abnormal vision, Drosophila)-like 2 (Hu antigen B) [Source:HGNC Symbol;Acc:3313] | |
| ELAVL4 | ELAV (embryonic lethal, abnormal vision, Drosophila)-like 4 (Hu antigen D) [Source:HGNC Symbol;Acc:3315] | |
| ELF1 | E74-like factor 1 (ets domain transcription factor) [Source:HGNC Symbol;Acc:3316] | |
| ELF3 | E74-like factor 3 (ets domain transcription factor, epithelial-specific) [Source:HGNC Symbol;Acc:3318] | |
| ELF4 | E74-like factor 4 (ets domain transcription factor) | √ |
| ELF5 | E74-like factor 5 (ets domain transcription factor) [Source:HGNC Symbol;Acc:3320] | |
| ELL | Elongation factor RNA polymerase II | √ |
| ELL2 | Elongation factor, RNA polymerase II, 2 [Source:HGNC Symbol;Acc:17064] | |
| ELMO2 | Engulfment and cell motility 2 [Source:HGNC Symbol;Acc:17233] | |
| ELMO3 | Engulfment and cell motility 3 [Source:HGNC Symbol;Acc:17289] | |
| ELOF1 | Elongation factor 1 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:28691] | |
| ELOVL3 | Elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 3 [Source:HGNC Symbol;Acc:18047] | |
| ELOVL4 | Elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 4 [Source:HGNC Symbol;Acc:14415] | |
| ELOVL6 | ELOVL family member 6, elongation of long chain fatty acids (FEN1/Elo2, SUR4/Elo3-like, yeast) [Source:HGNC Symbol;Acc:15829] | |

| | | |
|----------------|--|--|
| ELP4 | Elongation protein 4 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:1171] | |
| ELTD1 | EGF, latrophilin and seven transmembrane domain containing 1 [Source:HGNC Symbol;Acc:20822] | |
| EMCN | Endomucin [Source:HGNC Symbol;Acc:16041] | |
| EMID2 | EMI domain containing 2 [Source:HGNC Symbol;Acc:18038] | |
| EMILIN1 | Elastin microfibril interfacier 1 [Source:HGNC Symbol;Acc:19880] | |
| EML3 | Echinoderm microtubule associated protein like 3 [Source:HGNC Symbol;Acc:26666] | |
| EML5 | Echinoderm microtubule associated protein like 5 [Source:HGNC Symbol;Acc:18197] | |
| EML6 | Echinoderm microtubule associated protein like 6 [Source:HGNC Symbol;Acc:35412] | |
| EMP2 | Epithelial membrane protein 2 [Source:HGNC Symbol;Acc:3334] | |
| EMR1 | Egf-like module containing, mucin-like, hormone receptor-like 1 [Source:HGNC Symbol;Acc:3336] | |
| EMR2 | Egf-like module containing, mucin-like, hormone receptor-like 2 [Source:HGNC Symbol;Acc:3337] | |
| EMR3 | Egf-like module containing, mucin-like, hormone receptor-like 3 [Source:HGNC Symbol;Acc:23647] | |
| ENDOD1 | Endonuclease domain containing 1 [Source:HGNC Symbol;Acc:29129] | |
| ENG | Endoglin [Source:HGNC Symbol;Acc:3349] | |
| ENGASE | Endo-beta-N-acetylglucosaminidase [Source:HGNC Symbol;Acc:24622] | |
| ENO2 | Enolase 2 (gamma, neuronal) [Source:HGNC Symbol;Acc:3353] | |
| ENOX2 | Ecto-NOX disulfide-thiol exchanger 2 [Source:HGNC Symbol;Acc:2259] | |
| ENPEP | Glutamyl aminopeptidase (aminopeptidase A) [Source:HGNC Symbol;Acc:3355] | |
| ENPP1 | Ectonucleotide pyrophosphatase/phosphodiesterase 1 [Source:HGNC Symbol;Acc:3356] | |
| ENPP3 | Ectonucleotide pyrophosphatase/phosphodiesterase 3 [Source:HGNC Symbol;Acc:3358] | |
| ENPP4 | Ectonucleotide pyrophosphatase/phosphodiesterase 4 (putative) [Source:HGNC Symbol;Acc:3359] | |

| | | |
|-----------------|---|--|
| ENPP5 | Ectonucleotide pyrophosphatase/phosphodiesterase 5 (putative) [Source:HGNC Symbol;Acc:13717] | |
| ENPP6 | Ectonucleotide pyrophosphatase/phosphodiesterase 6 [Source:HGNC Symbol;Acc:23409] | |
| ENTPD1 | Ectonucleoside triphosphate diphosphohydrolase 1 [Source:HGNC Symbol;Acc:3363] | |
| ENTPD6 | Ectonucleoside triphosphate diphosphohydrolase 6 (putative) [Source:HGNC Symbol;Acc:3368] | |
| ENTPD8 | Ectonucleoside triphosphate diphosphohydrolase 8 [Source:HGNC Symbol;Acc:24860] | |
| EOMES | Eomesodermin [Source:HGNC Symbol;Acc:3372] | |
| EP400 | E1A binding protein p400 [Source:HGNC Symbol;Acc:11958] | |
| EP400NL | EP400 N-terminal like [Source:HGNC Symbol;Acc:26602] | |
| EPB41 | Erythrocyte membrane protein band 4.1 (elliptocytosis 1, RH-linked) [Source:HGNC Symbol;Acc:3377] | |
| EPB41L1 | Erythrocyte membrane protein band 4.1-like 1 [Source:HGNC Symbol;Acc:3378] | |
| EPB41L3 | Erythrocyte membrane protein band 4.1-like 3 [Source:HGNC Symbol;Acc:3380] | |
| EPC1 | Enhancer of polycomb homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:19876] | |
| EPC2 | Enhancer of polycomb homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:24543] | |
| EPCAM | Epithelial cell adhesion molecule [Source:HGNC Symbol;Acc:11529] | |
| EPHA1 | EPH receptor A1 [Source:HGNC Symbol;Acc:3385] | |
| EPHA6 | EPH receptor A6 [Source:HGNC Symbol;Acc:19296] | |
| EPHA7 | EPH receptor A7 [Source:HGNC Symbol;Acc:3390] | |
| EPHB1 | EPH receptor B1 [Source:HGNC Symbol;Acc:3392] | |
| EPHB3 | EPH receptor B3 [Source:HGNC Symbol;Acc:3394] | |
| EPHB6 | EPH receptor B6 [Source:HGNC Symbol;Acc:3396] | |
| EPHX1 | Epoxide hydrolase 1, microsomal (xenobiotic) [Source:HGNC Symbol;Acc:3401] | |
| EPM2AIP1 | EPM2A (laforin) interacting protein 1 [Source:HGNC Symbol;Acc:19735] | |

| | | |
|----------------|---|---|
| EPN2 | Epsin 2 [Source:HGNC Symbol;Acc:18639] | |
| EPN3 | Epsin 3 [Source:HGNC Symbol;Acc:18235] | |
| EPO | Erythropoietin [Source:HGNC Symbol;Acc:3415] | |
| EPS8 | Epidermal growth factor receptor pathway substrate 8 [Source:HGNC Symbol;Acc:3420] | |
| EPT1 | Ethanolaminephosphotransferase 1 (CDP-ethanolamine-specific) [Source:HGNC Symbol;Acc:29361] | |
| EPX | Eosinophil peroxidase [Source:HGNC Symbol;Acc:3423] | |
| ERAP1 | Endoplasmic reticulum aminopeptidase 1 [Source:HGNC Symbol;Acc:18173] | |
| ERAP2 | Endoplasmic reticulum aminopeptidase 2 [Source:HGNC Symbol;Acc:29499] | |
| ERBB2 | V-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian) | √ |
| ERBB2IP | ErbB2 interacting protein [Source:HGNC Symbol;Acc:15842] | |
| ERBB4 | V-erb-a erythroblastic leukemia viral oncogene homolog 4 (avian) [Source:HGNC Symbol;Acc:3432] | |
| ERC1 | ELKS/RAB6-interacting/CAST family member 1 [Source:HGNC Symbol;Acc:17072] | |
| ERC2 | ELKS/RAB6-interacting/CAST family member 2 [Source:HGNC Symbol;Acc:31922] | |
| ERCC1 | Excision repair cross-complementing rodent repair deficiency, complementation group 1 (includes overlapping antisense sequence) [Source:HGNC Symbol;Acc:3433] | |
| ERCC2 | Excision repair cross-complementing rodent repair deficiency, complementation group 2 | √ |
| ERCC6 | Excision repair cross-complementing rodent repair deficiency, complementation group 6 [Source:HGNC Symbol;Acc:3438] | |
| ERGIC2 | ERGIC and golgi 2 [Source:HGNC Symbol;Acc:30208] | |
| ERGIC3 | ERGIC and golgi 3 [Source:HGNC Symbol;Acc:15927] | |
| ERI1 | Exoribonuclease 1 [Source:HGNC Symbol;Acc:23994] | |
| ERIC1 | Glutamate-rich 1 [Source:HGNC Symbol;Acc:27234] | |
| ERLIN1 | ER lipid raft associated 1 [Source:HGNC Symbol;Acc:16947] | |

| | | |
|----------------|---|---|
| ERLIN2 | ER lipid raft associated 2 [Source:HGNC Symbol;Acc:1356] | |
| ERMAP | Erythroblast membrane-associated protein (Scianna blood group) [Source:HGNC Symbol;Acc:15743] | |
| ERMN | Ermin, ERM-like protein [Source:HGNC Symbol;Acc:29208] | |
| ERMP1 | Endoplasmic reticulum metallopeptidase 1 [Source:HGNC Symbol;Acc:23703] | |
| ERO1LB | ERO1-like beta (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:14355] | |
| ERRFI1 | ERBB receptor feedback inhibitor 1 [Source:HGNC Symbol;Acc:18185] | |
| ESCO2 | Establishment of cohesion 1 homolog 2 (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:27230] | |
| ESM1 | Endothelial cell-specific molecule 1 [Source:HGNC Symbol;Acc:3466] | |
| ESPNL | Espin-like [Source:HGNC Symbol;Acc:27937] | |
| ESR1 | Estrogen receptor 1 [Source:HGNC Symbol;Acc:3467] | |
| ESR2 | Estrogen receptor 2 (ER beta) [Source:HGNC Symbol;Acc:3468] | |
| ESRRA | Estrogen-related receptor alpha [Source:HGNC Symbol;Acc:3471] | |
| ESRRB | Estrogen-related receptor beta [Source:HGNC Symbol;Acc:3473] | |
| ESYT2 | Extended synaptotagmin-like protein 2 [Source:HGNC Symbol;Acc:22211] | |
| ESYT3 | Extended synaptotagmin-like protein 3 [Source:HGNC Symbol;Acc:24295] | |
| ETV3 | Ets variant 3 [Source:HGNC Symbol;Acc:3492] | |
| ETV5 | Ets variant 5 | √ |
| EVC | Ellis van Creveld syndrome [Source:HGNC Symbol;Acc:3497] | |
| EVC2 | Ellis van Creveld syndrome 2 [Source:HGNC Symbol;Acc:19747] | |
| EVI5 | Ecotropic viral integration site 5 [Source:HGNC Symbol;Acc:3501] | |
| EVL | Enah/Vasp-like [Source:HGNC Symbol;Acc:20234] | |
| EVX2 | Even-skipped homeobox 2 [Source:HGNC Symbol;Acc:3507] | |
| EXD1 | Exonuclease 3'-5' domain containing 1 [Source:HGNC Symbol;Acc:28507] | |
| EXO1 | Exonuclease 1 [Source:HGNC Symbol;Acc:3511] | |
| EXOC1 | Exocyst complex component 1 [Source:HGNC Symbol;Acc:30380] | |
| EXOC2 | Exocyst complex component 2 [Source:HGNC Symbol;Acc:24968] | |
| EXOC3L4 | Exocyst complex component 3-like 4 [Source:HGNC Symbol;Acc:20120] | |
| EXOC4 | Exocyst complex component 4 [Source:HGNC Symbol;Acc:30389] | |
| EXOC6 | Exocyst complex component 6 [Source:HGNC Symbol;Acc:23196] | |
| EXOC6B | Exocyst complex component 6B [Source:HGNC Symbol;Acc:17085] | |

| | | |
|----------------|---|---|
| EXOC7 | Exocyst complex component 7 [Source:HGNC Symbol;Acc:23214] | |
| EXOC8 | Exocyst complex component 8 [Source:HGNC Symbol;Acc:24659] | |
| EXOSC10 | Exosome component 10 [Source:HGNC Symbol;Acc:9138] | |
| EXOSC4 | Exosome component 4 [Source:HGNC Symbol;Acc:18189] | |
| EXPH5 | Exophilin 5 [Source:HGNC Symbol;Acc:30578] | |
| EXT1 | Exostosin 1 | √ |
| EXTL2 | Exostoses (multiple)-like 2 [Source:HGNC Symbol;Acc:3516] | |
| EXTL3 | Exostoses (multiple)-like 3 [Source:HGNC Symbol;Acc:3518] | |
| EYA2 | Eyes absent homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:3520] | |
| EZH1 | Enhancer of zeste homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:3526] | |
| EZH2 | Enhancer of zeste homolog 2 (Drosophila) | √ |
| F11 | Coagulation factor XI [Source:HGNC Symbol;Acc:3529] | |
| F11R | F11 receptor [Source:HGNC Symbol;Acc:14685] | |
| F2R | Coagulation factor II (thrombin) receptor [Source:HGNC Symbol;Acc:3537] | |
| F3 | Coagulation factor III (thromboplastin, tissue factor) [Source:HGNC Symbol;Acc:3541] | |
| F5 | Coagulation factor V (proaccelerin, labile factor) [Source:HGNC Symbol;Acc:3542] | |
| F7 | Coagulation factor VII (serum prothrombin conversion accelerator) [Source:HGNC Symbol;Acc:3544] | |
| F8 | Coagulation factor VIII, procoagulant component [Source:HGNC Symbol;Acc:3546] | |
| FABP9 | Fatty acid binding protein 9, testis [Source:HGNC Symbol;Acc:3563] | |
| FADD | Fas (TNFRSF6)-associated via death domain [Source:HGNC Symbol;Acc:3573] | |
| FAF1 | Fas (TNFRSF6) associated factor 1 [Source:HGNC Symbol;Acc:3578] | |
| FAH | Fumarylacetoacetate hydrolase (fumarylacetoacetase) [Source:HGNC Symbol;Acc:3579] | |
| FAHD2A | Fumarylacetoacetate hydrolase domain containing 2A [Source:HGNC Symbol;Acc:24252] | |
| FAIM | Fas apoptotic inhibitory molecule [Source:HGNC Symbol;Acc:18703] | |
| FAIM2 | Fas apoptotic inhibitory molecule 2 [Source:HGNC Symbol;Acc:17067] | |

| | | |
|-----------------|---|--|
| FAM3 | Fas apoptotic inhibitory molecule 3 [Source:HGNC Symbol;Acc:14315] | |
| FAM101A | Family with sequence similarity 101, member A [Source:HGNC Symbol;Acc:27051] | |
| FAM101B | Family with sequence similarity 101, member B [Source:HGNC Symbol;Acc:28705] | |
| FAM102A | Family with sequence similarity 102, member A [Source:HGNC Symbol;Acc:31419] | |
| FAM102B | Family with sequence similarity 102, member B [Source:HGNC Symbol;Acc:27637] | |
| FAM103A1 | Family with sequence similarity 103, member A1 [Source:HGNC Symbol;Acc:31022] | |
| FAM105B | Family with sequence similarity 105, member B [Source:HGNC Symbol;Acc:25118] | |
| FAM106A | Family with sequence similarity 106, member A [Source:HGNC Symbol;Acc:25682] | |
| FAM106B | Family with sequence similarity 106, member B [Source:HGNC Symbol;Acc:32450] | |
| FAM109A | Family with sequence similarity 109, member A [Source:HGNC Symbol;Acc:26509] | |
| FAM110B | Family with sequence similarity 110, member B [Source:HGNC Symbol;Acc:28587] | |
| FAM111B | Family with sequence similarity 111, member B [Source:HGNC Symbol;Acc:24200] | |
| FAM113A | Family with sequence similarity 113, member A [Source:HGNC Symbol;Acc:16212] | |
| FAM114A2 | Family with sequence similarity 114, member A2 [Source:HGNC Symbol;Acc:1333] | |
| FAM115A | Family with sequence similarity 115, member A [Source:HGNC Symbol;Acc:22201] | |
| FAM115C | Family with sequence similarity 115, member C [Source:HGNC Symbol;Acc:26878] | |
| FAM116B | Family with sequence similarity 116, member B [Source:HGNC Symbol;Acc:32690] | |

| | | |
|----------------|--|--|
| FAM118A | Family with sequence similarity 118, member A [Source:HGNC Symbol;Acc:1313] | |
| FAM119B | Family with sequence similarity 119, member B [Source:HGNC Symbol;Acc:24936] | |
| FAM120C | Family with sequence similarity 120C [Source:HGNC Symbol;Acc:16949] | |
| FAM123C | Family with sequence similarity 123C [Source:HGNC Symbol;Acc:26771] | |
| FAM124B | Family with sequence similarity 124B [Source:HGNC Symbol;Acc:26224] | |
| FAM125B | Family with sequence similarity 125, member B [Source:HGNC Symbol;Acc:23368] | |
| FAM126A | Family with sequence similarity 126, member A [Source:HGNC Symbol;Acc:24587] | |
| FAM127C | Family with sequence similarity 127, member C [Source:HGNC Symbol;Acc:33156] | |
| FAM129B | Family with sequence similarity 129, member B [Source:HGNC Symbol;Acc:25282] | |
| FAM131A | Family with sequence similarity 131, member A [Source:HGNC Symbol;Acc:28308] | |
| FAM134A | Family with sequence similarity 134, member A [Source:HGNC Symbol;Acc:28450] | |
| FAM134C | Family with sequence similarity 134, member C [Source:HGNC Symbol;Acc:27258] | |
| FAM135A | Family with sequence similarity 135, member A [Source:HGNC Symbol;Acc:21084] | |
| FAM135B | Family with sequence similarity 135, member B [Source:HGNC Symbol;Acc:28029] | |
| FAM136A | Family with sequence similarity 136, member A [Source:HGNC Symbol;Acc:25911] | |
| FAM13A | Family with sequence similarity 13, member A [Source:HGNC Symbol;Acc:19367] | |
| FAM13C | Family with sequence similarity 13, member C [Source:HGNC Symbol;Acc:19371] | |
| FAM149A | Family with sequence similarity 149, member A [Source:HGNC Symbol;Acc:24527] | |

| | | |
|-----------------|---|--|
| FAM149B1 | Family with sequence similarity 149, member B1 [Source:HGNC Symbol;Acc:29162] | |
| FAM150B | Family with sequence similarity 150, member B [Source:HGNC Symbol;Acc:27683] | |
| FAM153A | Family with sequence similarity 153, member A [Source:HGNC Symbol;Acc:29940] | |
| FAM153B | Family with sequence similarity 153, member B [Source:HGNC Symbol;Acc:27323] | |
| FAM153C | Family with sequence similarity 153, member C [Source:HGNC Symbol;Acc:33936] | |
| FAM156B | Family with sequence similarity 156, member B [Source:HGNC Symbol;Acc:31962] | |
| FAM160A1 | Family with sequence similarity 160, member A1 [Source:HGNC Symbol;Acc:34237] | |
| FAM161A | Family with sequence similarity 161, member A [Source:HGNC Symbol;Acc:25808] | |
| FAM168A | Family with sequence similarity 168, member A [Source:HGNC Symbol;Acc:28999] | |
| FAM169B | Family with sequence similarity 169, member B [Source:HGNC Symbol;Acc:26835] | |
| FAM170B | Family with sequence similarity 170, member B [Source:HGNC Symbol;Acc:19736] | |
| FAM177B | Family with sequence similarity 177, member B [Source:HGNC Symbol;Acc:34395] | |
| FAM179A | Family with sequence similarity 179, member A [Source:HGNC Symbol;Acc:33715] | |
| FAM181B | Family with sequence similarity 181, member B [Source:HGNC Symbol;Acc:28512] | |
| FAM182A | Family with sequence similarity 182, member A [Source:HGNC Symbol;Acc:16222] | |
| FAM184A | Family with sequence similarity 184, member A [Source:HGNC Symbol;Acc:20991] | |

| | | |
|-----------------|---|--|
| FAM186B | Family with sequence similarity 186, member B [Source:HGNC Symbol;Acc:25296] | |
| FAM189A1 | Family with sequence similarity 189, member A1 [Source:HGNC Symbol;Acc:29075] | |
| FAM189B | Family with sequence similarity 189, member B [Source:HGNC Symbol;Acc:1233] | |
| FAM18B2 | Family with sequence similarity 18, member B2 [Source:HGNC Symbol;Acc:30453] | |
| FAM190A | Family with sequence similarity 190, member A [Source:HGNC Symbol;Acc:29349] | |
| FAM190B | Family with sequence similarity 190, member B [Source:HGNC Symbol;Acc:29197] | |
| FAM196A | Family with sequence similarity 196, member A [Source:HGNC Symbol;Acc:33859] | |
| FAM19A1 | Family with sequence similarity 19 (chemokine (C-C motif)-like), member A1 [Source:HGNC Symbol;Acc:21587] | |
| FAM19A2 | Family with sequence similarity 19 (chemokine (C-C motif)-like), member A2 [Source:HGNC Symbol;Acc:21589] | |
| FAM19A3 | Family with sequence similarity 19 (chemokine (C-C motif)-like), member A3 [Source:HGNC Symbol;Acc:21590] | |
| FAM200A | Family with sequence similarity 200, member A [Source:HGNC Symbol;Acc:25401] | |
| FAM20A | Family with sequence similarity 20, member A [Source:HGNC Symbol;Acc:23015] | |
| FAM20C | Family with sequence similarity 20, member C [Source:HGNC Symbol;Acc:22140] | |
| FAM23A | Family with sequence similarity 23, member A [Source:HGNC Symbol;Acc:23473] | |
| FAM23B | Family with sequence similarity 23, member B [Source:HGNC Symbol;Acc:23474] | |
| FAM26E | Family with sequence similarity 26, member E [Source:HGNC Symbol;Acc:21568] | |

| | | |
|---------------|---|--|
| FAM38A | Family with sequence similarity 38, member A [Source:HGNC Symbol;Acc:28993] | |
| FAM38B | Family with sequence similarity 38, member B [Source:HGNC Symbol;Acc:26270] | |
| FAM3A | Family with sequence similarity 3, member A [Source:HGNC Symbol;Acc:13749] | |
| FAM3D | Family with sequence similarity 3, member D [Source:HGNC Symbol;Acc:18665] | |
| FAM40A | Family with sequence similarity 40, member A [Source:HGNC Symbol;Acc:25916] | |
| FAM46A | Family with sequence similarity 46, member A [Source:HGNC Symbol;Acc:18345] | |
| FAM47A | Family with sequence similarity 47, member A [Source:HGNC Symbol;Acc:29962] | |
| FAM47C | Family with sequence similarity 47, member C [Source:HGNC Symbol;Acc:25301] | |
| FAM47E | Family with sequence similarity 47, member E [Source:HGNC Symbol;Acc:34343] | |
| FAM49B | Family with sequence similarity 49, member B [Source:HGNC Symbol;Acc:25216] | |
| FAM53A | Family with sequence similarity 53, member A [Source:HGNC Symbol;Acc:31860] | |
| FAM53B | Family with sequence similarity 53, member B [Source:HGNC Symbol;Acc:28968] | |
| FAM53C | Family with sequence similarity 53, member C [Source:HGNC Symbol;Acc:1336] | |
| FAM55B | Family with sequence similarity 55, member B [Source:HGNC Symbol;Acc:26331] | |
| FAM55C | Family with sequence similarity 55, member C [Source:HGNC Symbol;Acc:28238] | |
| FAM55D | Family with sequence similarity 55, member D [Source:HGNC Symbol;Acc:23117] | |

| | | |
|----------------|--|--|
| FAM59B | Family with sequence similarity 59, member B [Source:HGNC Symbol;Acc:27172] | |
| FAM5B | Family with sequence similarity 5, member B [Source:HGNC Symbol;Acc:13746] | |
| FAM63A | Family with sequence similarity 63, member A [Source:HGNC Symbol;Acc:25648] | |
| FAM63B | Family with sequence similarity 63, member B [Source:HGNC Symbol;Acc:26954] | |
| FAM65C | Family with sequence similarity 65, member C [Source:HGNC Symbol;Acc:16168] | |
| FAM69B | Family with sequence similarity 69, member B [Source:HGNC Symbol;Acc:28290] | |
| FAM70A | Family with sequence similarity 70, member A [Source:HGNC Symbol;Acc:26086] | |
| FAM70B | Family with sequence similarity 70, member B [Source:HGNC Symbol;Acc:28297] | |
| FAM71B | Family with sequence similarity 71, member B [Source:HGNC Symbol;Acc:28397] | |
| FAM71C | Family with sequence similarity 71, member C [Source:HGNC Symbol;Acc:28594] | |
| FAM71F2 | Family with sequence similarity 71, member F2 [Source:HGNC Symbol;Acc:27998] | |
| FAM72A | Family with sequence similarity 72, member A [Source:HGNC Symbol;Acc:24044] | |
| FAM72B | Family with sequence similarity 72, member B [Source:HGNC Symbol;Acc:24805] | |
| FAM73A | Family with sequence similarity 73, member A [Source:HGNC Symbol;Acc:24741] | |
| FAM73B | Family with sequence similarity 73, member B [Source:HGNC Symbol;Acc:23621] | |
| FAM75A3 | Family with sequence similarity 75, member A3 [Source:HGNC Symbol;Acc:32003] | |

| | | |
|----------------|--|--|
| FAM75A4 | Family with sequence similarity 75, member A4 [Source:HGNC Symbol;Acc:32004] | |
| FAM75A5 | Family with sequence similarity 75, member A5 [Source:HGNC Symbol;Acc:32005] | |
| FAM75A6 | Family with sequence similarity 75, member A6 [Source:HGNC Symbol;Acc:32006] | |
| FAM75A7 | Family with sequence similarity 75, member A7 [Source:HGNC Symbol;Acc:32007] | |
| FAM76A | Family with sequence similarity 76, member A [Source:HGNC Symbol;Acc:28530] | |
| FAM76B | Family with sequence similarity 76, member B [Source:HGNC Symbol;Acc:28492] | |
| FAM78A | Family with sequence similarity 78, member A [Source:HGNC Symbol;Acc:25465] | |
| FAM78B | Family with sequence similarity 78, member B [Source:HGNC Symbol;Acc:13495] | |
| FAM82B | Family with sequence similarity 82, member B [Source:HGNC Symbol;Acc:24285] | |
| FAM83A | Family with sequence similarity 83, member A [Source:HGNC Symbol;Acc:28210] | |
| FAM83B | Family with sequence similarity 83, member B [Source:HGNC Symbol;Acc:21357] | |
| FAM83E | Family with sequence similarity 83, member E [Source:HGNC Symbol;Acc:25972] | |
| FAM83G | Family with sequence similarity 83, member G [Source:HGNC Symbol;Acc:32554] | |
| FAM83H | Family with sequence similarity 83, member H [Source:HGNC Symbol;Acc:24797] | |
| FAM84A | Family with sequence similarity 84, member A [Source:HGNC Symbol;Acc:20743] | |
| FAM86A | Family with sequence similarity 86, member A [Source:HGNC Symbol;Acc:32221] | |

| | | |
|----------------|---|---|
| FAM86B1 | Family with sequence similarity 86, member B1 [Source:HGNC Symbol;Acc:28268] | |
| FAM89A | Family with sequence similarity 89, member A [Source:HGNC Symbol;Acc:25057] | |
| FAM8A1 | Family with sequence similarity 8, member A1 [Source:HGNC Symbol;Acc:16372] | |
| FAM91A1 | Family with sequence similarity 91, member A1 [Source:HGNC Symbol;Acc:26306] | |
| FAM98A | Family with sequence similarity 98, member A [Source:HGNC Symbol;Acc:24520] | |
| FAN1 | FANCD2/FANCI-associated nuclease 1 [Source:HGNC Symbol;Acc:29170] | |
| FANCA | Fanconi anemia, complementation group A | √ |
| FANCD2 | Fanconi anemia, complementation group D2 | √ |
| FANCI | Fanconi anemia, complementation group I [Source:HGNC Symbol;Acc:25568] | |
| FANK1 | Fibronectin type III and ankyrin repeat domains 1 [Source:HGNC Symbol;Acc:23527] | |
| FAP | Fibroblast activation protein, alpha [Source:HGNC Symbol;Acc:3590] | |
| FARP1 | FERM, rhogef (ARHGEF) and pleckstrin domain protein 1 (chondrocyte-derived) [Source:HGNC Symbol;Acc:3591] | |
| FARP2 | FERM, rhogef and pleckstrin domain protein 2 [Source:HGNC Symbol;Acc:16460] | |
| FARS2 | Phenylalanyl-trna synthetase 2, mitochondrial [Source:HGNC Symbol;Acc:21062] | |
| FARSA | Phenylalanyl-trna synthetase, alpha subunit [Source:HGNC Symbol;Acc:3592] | |
| FARSB | Phenylalanyl-trna synthetase, beta subunit [Source:HGNC Symbol;Acc:17800] | |
| FASLG | Fas ligand (TNF superfamily, member 6) [Source:HGNC Symbol;Acc:11936] | |
| FASN | Fatty acid synthase [Source:HGNC Symbol;Acc:3594] | |
| FASTKD5 | FAST kinase domains 5 [Source:HGNC Symbol;Acc:25790] | |

| | | |
|---------------|---|---|
| FAT1 | FAT tumor suppressor homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:3595] | |
| FAT2 | FAT tumor suppressor homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:3596] | |
| FAT3 | FAT tumor suppressor homolog 3 (Drosophila) [Source:HGNC Symbol;Acc:23112] | |
| FAT4 | FAT tumor suppressor homolog 4 (Drosophila) [Source:HGNC Symbol;Acc:23109] | |
| FAU | Finkel-Biskis-Reilly murine sarcoma virus (FBR-musv) ubiquitously expressed [Source:HGNC Symbol;Acc:3597] | |
| FBLN1 | Fibulin 1 [Source:HGNC Symbol;Acc:3600] | |
| FBLN2 | Fibulin 2 [Source:HGNC Symbol;Acc:3601] | |
| FBLN5 | Fibulin 5 [Source:HGNC Symbol;Acc:3602] | |
| FBN1 | Fibrillin 1 [Source:HGNC Symbol;Acc:3603] | |
| FBN2 | Fibrillin 2 [Source:HGNC Symbol;Acc:3604] | |
| FBN3 | Fibrillin 3 [Source:HGNC Symbol;Acc:18794] | |
| FBXL13 | F-box and leucine-rich repeat protein 13 [Source:HGNC Symbol;Acc:21658] | |
| FBXL15 | F-box and leucine-rich repeat protein 15 [Source:HGNC Symbol;Acc:28155] | |
| FBXL17 | F-box and leucine-rich repeat protein 17 [Source:HGNC Symbol;Acc:13615] | |
| FBXL18 | F-box and leucine-rich repeat protein 18 [Source:HGNC Symbol;Acc:21874] | |
| FBXL19 | F-box and leucine-rich repeat protein 19 [Source:HGNC Symbol;Acc:25300] | |
| FBXL20 | F-box and leucine-rich repeat protein 20 [Source:HGNC Symbol;Acc:24679] | |
| FBXL5 | F-box and leucine-rich repeat protein 5 [Source:HGNC Symbol;Acc:13602] | |
| FBXL7 | F-box and leucine-rich repeat protein 7 [Source:HGNC Symbol;Acc:13604] | |
| FBXO11 | F-box protein 11 | √ |
| FBXO17 | F-box protein 17 [Source:HGNC Symbol;Acc:18754] | |
| FBXO18 | F-box protein, helicase, 18 [Source:HGNC Symbol;Acc:13620] | |

| | | |
|---------------|---|---|
| FBXO25 | F-box protein 25 [Source:HGNC Symbol;Acc:13596] | |
| FBXO28 | F-box protein 28 [Source:HGNC Symbol;Acc:29046] | |
| FBXO3 | F-box protein 3 [Source:HGNC Symbol;Acc:13582] | |
| FBXO32 | F-box protein 32 [Source:HGNC Symbol;Acc:16731] | |
| FBXO33 | F-box protein 33 [Source:HGNC Symbol;Acc:19833] | |
| FBXO34 | F-box protein 34 [Source:HGNC Symbol;Acc:20201] | |
| FBXO4 | F-box protein 4 [Source:HGNC Symbol;Acc:13583] | |
| FBXO40 | F-box protein 40 [Source:HGNC Symbol;Acc:29816] | |
| FBXO42 | F-box protein 42 [Source:HGNC Symbol;Acc:29249] | |
| FBXO44 | F-box protein 44 [Source:HGNC Symbol;Acc:24847] | |
| FBXO5 | F-box protein 5 [Source:HGNC Symbol;Acc:13584] | |
| FBXO7 | F-box protein 7 [Source:HGNC Symbol;Acc:13586] | |
| FBXW11 | F-box and WD repeat domain containing 11 [Source:HGNC Symbol;Acc:13607] | |
| FBXW2 | F-box and WD repeat domain containing 2 [Source:HGNC Symbol;Acc:13608] | |
| FBXW7 | F-box and WD repeat domain containing 7 | √ |
| FCGBP | Fc fragment of igg binding protein [Source:HGNC Symbol;Acc:13572] | |
| FCGR1A | Fc fragment of igg, high affinity Ia, receptor (CD64) [Source:HGNC Symbol;Acc:3613] | |
| FCGR1B | Fc fragment of igg, high affinity Ib, receptor (CD64) [Source:HGNC Symbol;Acc:3614] | |
| FCGR2A | Fc fragment of igg, low affinity iia, receptor (CD32) [Source:HGNC Symbol;Acc:3616] | |
| FCHO2 | FCH domain only 2 [Source:HGNC Symbol;Acc:25180] | |
| FCHSD1 | FCH and double SH3 domains 1 [Source:HGNC Symbol;Acc:25463] | |
| FCRL2 | Fc receptor-like 2 [Source:HGNC Symbol;Acc:14875] | |
| FCRL5 | Fc receptor-like 5 [Source:HGNC Symbol;Acc:18508] | |
| FDFT1 | Farnesyl-diphosphate farnesyltransferase 1 [Source:HGNC Symbol;Acc:3629] | |
| FDX1L | Ferredoxin 1-like [Source:HGNC Symbol;Acc:30546] | |
| FDXR | Ferredoxin reductase [Source:HGNC Symbol;Acc:3642] | |
| FECH | Ferrochelatase [Source:HGNC Symbol;Acc:3647] | |

| | | |
|----------------|--|---|
| FEM1B | Fem-1 homolog b (C. Elegans) [Source:HGNC Symbol;Acc:3649] | |
| FEM1C | Fem-1 homolog c (C. Elegans) [Source:HGNC Symbol;Acc:16933] | |
| FER1L5 | Fer-1-like 5 (C. Elegans) [Source:HGNC Symbol;Acc:19044] | |
| FERMT2 | Fermitin family member 2 [Source:HGNC Symbol;Acc:15767] | |
| FES | Feline sarcoma oncogene [Source:HGNC Symbol;Acc:3657] | |
| FEZ1 | Fasciculation and elongation protein zeta 1 (zygin I) [Source:HGNC Symbol;Acc:3659] | |
| FEZF2 | FEZ family zinc finger 2 [Source:HGNC Symbol;Acc:13506] | |
| FFAR1 | Free fatty acid receptor 1 [Source:HGNC Symbol;Acc:4498] | |
| FGB | Fibrinogen beta chain [Source:HGNC Symbol;Acc:3662] | |
| FGD1 | FYVE, rhogef and PH domain containing 1 [Source:HGNC Symbol;Acc:3663] | |
| FGD2 | FYVE, rhogef and PH domain containing 2 [Source:HGNC Symbol;Acc:3664] | |
| FGD3 | FYVE, rhogef and PH domain containing 3 [Source:HGNC Symbol;Acc:16027] | |
| FGD6 | FYVE, rhogef and PH domain containing 6 [Source:HGNC Symbol;Acc:21740] | |
| FGF11 | Fibroblast growth factor 11 [Source:HGNC Symbol;Acc:3667] | |
| FGF12 | Fibroblast growth factor 12 [Source:HGNC Symbol;Acc:3668] | |
| FGF19 | Fibroblast growth factor 19 [Source:HGNC Symbol;Acc:3675] | |
| FGF2 | Fibroblast growth factor 2 (basic) [Source:HGNC Symbol;Acc:3676] | |
| FGF23 | Fibroblast growth factor 23 [Source:HGNC Symbol;Acc:3680] | |
| FGF8 | Fibroblast growth factor 8 (androgen-induced) [Source:HGNC Symbol;Acc:3686] | |
| FGFR1 | Fibroblast growth factor receptor 1 | √ |
| FGFR1OP | FGFR1 oncogene partner | √ |
| FGFR2 | Fibroblast growth factor receptor 2 | √ |
| FGFRL1 | Fibroblast growth factor receptor-like 1 [Source:HGNC Symbol;Acc:3693] | |
| FHAD1 | Forkhead-associated (FHA) phosphopeptide binding domain 1 [Source:HGNC Symbol;Acc:29408] | |
| FHDC1 | FH2 domain containing 1 [Source:HGNC Symbol;Acc:29363] | |
| FHIT | Fragile histidine triad gene | √ |

| | | |
|----------------|--|--|
| FHL1 | Four and a half LIM domains 1 [Source:HGNC Symbol;Acc:3702] | |
| FHL2 | Four and a half LIM domains 2 [Source:HGNC Symbol;Acc:3703] | |
| FHOD3 | Formin homology 2 domain containing 3 [Source:HGNC Symbol;Acc:26178] | |
| FIBCD1 | Fibrinogen C domain containing 1 [Source:HGNC Symbol;Acc:25922] | |
| FIGN | Fidgetin [Source:HGNC Symbol;Acc:13285] | |
| FIZ1 | FLT3-interacting zinc finger 1 [Source:HGNC Symbol;Acc:25917] | |
| FKBP14 | FK506 binding protein 14, 22 kda [Source:HGNC Symbol;Acc:18625] | |
| FKBP15 | FK506 binding protein 15, 133kda [Source:HGNC Symbol;Acc:23397] | |
| FKBP1A | FK506 binding protein 1A, 12kda [Source:HGNC Symbol;Acc:3711] | |
| FKBP1C | FK506 binding protein 1C [Source:HGNC Symbol;Acc:21376] | |
| FKBP2 | FK506 binding protein 2, 13kda [Source:HGNC Symbol;Acc:3718] | |
| FKBP5 | FK506 binding protein 5 [Source:HGNC Symbol;Acc:3721] | |
| FKBP6 | FK506 binding protein 6, 36kda [Source:HGNC Symbol;Acc:3722] | |
| FKBP9 | FK506 binding protein 9, 63 kda [Source:HGNC Symbol;Acc:3725] | |
| FKTN | Fukutin [Source:HGNC Symbol;Acc:3622] | |
| FLNB | Filamin B, beta [Source:HGNC Symbol;Acc:3755] | |
| FLNC | Filamin C, gamma [Source:HGNC Symbol;Acc:3756] | |
| FLOT1 | Flotillin 1 [Source:HGNC Symbol;Acc:3757] | |
| FLRT2 | Fibronectin leucine rich transmembrane protein 2 [Source:HGNC Symbol;Acc:3761] | |
| FLRT3 | Fibronectin leucine rich transmembrane protein 3 [Source:HGNC Symbol;Acc:3762] | |
| FLT4 | Fms-related tyrosine kinase 4 [Source:HGNC Symbol;Acc:3767] | |
| FLYWCH1 | FLYWCH-type zinc finger 1 [Source:HGNC Symbol;Acc:25404] | |
| FLYWCH2 | FLYWCH family member 2 [Source:HGNC Symbol;Acc:25178] | |
| FMN2 | Formin 2 [Source:HGNC Symbol;Acc:14074] | |
| FMO3 | Flavin containing monooxygenase 3 [Source:HGNC Symbol;Acc:3771] | |
| FMO4 | Flavin containing monooxygenase 4 [Source:HGNC Symbol;Acc:3772] | |
| FMR1 | Fragile X mental retardation 1 [Source:HGNC Symbol;Acc:3775] | |
| FMR1NB | Fragile X mental retardation 1 neighbor [Source:HGNC Symbol;Acc:26372] | |
| FN1 | Fibronectin 1 [Source:HGNC Symbol;Acc:3778] | |
| FN3K | Fructosamine 3 kinase [Source:HGNC Symbol;Acc:24822] | |

| | | |
|----------------|---|---|
| FN3KRP | Fructosamine 3 kinase related protein [Source:HGNC Symbol;Acc:25700] | |
| FNBP1 | Formin binding protein 1 | √ |
| FNBP1L | Formin binding protein 1-like [Source:HGNC Symbol;Acc:20851] | |
| FNBP4 | Formin binding protein 4 [Source:HGNC Symbol;Acc:19752] | |
| FNDC1 | Fibronectin type III domain containing 1 [Source:HGNC Symbol;Acc:21184] | |
| FNDC3A | Fibronectin type III domain containing 3A [Source:HGNC Symbol;Acc:20296] | |
| FNDC3B | Fibronectin type III domain containing 3B [Source:HGNC Symbol;Acc:24670] | |
| FNDC4 | Fibronectin type III domain containing 4 [Source:HGNC Symbol;Acc:20239] | |
| FNDC5 | Fibronectin type III domain containing 5 [Source:HGNC Symbol;Acc:20240] | |
| FNDC7 | Fibronectin type III domain containing 7 [Source:HGNC Symbol;Acc:26668] | |
| FNDC9 | Fibronectin type III domain containing 9 [Source:HGNC Symbol;Acc:33547] | |
| FNIP1 | Folliculin interacting protein 1 [Source:HGNC Symbol;Acc:29418] | |
| FNIP2 | Folliculin interacting protein 2 [Source:HGNC Symbol;Acc:29280] | |
| FNTB | Farnesyltransferase, CAAX box, beta [Source:HGNC Symbol;Acc:3785] | |
| FOLH1 | Folate hydrolase (prostate-specific membrane antigen) 1 [Source:HGNC Symbol;Acc:3788] | |
| FOXA3 | Forkhead box A3 [Source:HGNC Symbol;Acc:5023] | |
| FOXC1 | Forkhead box C1 [Source:HGNC Symbol;Acc:3800] | |
| FOXD4 | Forkhead box D4 [Source:HGNC Symbol;Acc:3805] | |
| FOXD4L1 | Forkhead box D4-like 1 [Source:HGNC Symbol;Acc:18521] | |
| FOXD4L3 | Forkhead box D4-like 3 [Source:HGNC Symbol;Acc:18523] | |
| FOXD4L6 | Forkhead box D4-like 6 [Source:HGNC Symbol;Acc:31986] | |
| FOXH1 | Forkhead box H1 [Source:HGNC Symbol;Acc:3814] | |
| FOXK1 | Forkhead box K1 [Source:HGNC Symbol;Acc:23480] | |
| FOXM1 | Forkhead box M1 [Source:HGNC Symbol;Acc:3818] | |
| FOXN4 | Forkhead box N4 [Source:HGNC Symbol;Acc:21399] | |

| | | |
|-----------------|--|---|
| FOXO3 | Forkhead box O3 [Source:HGNC Symbol;Acc:3821] | |
| FOXO4 | Forkhead box O4 [Source:HGNC Symbol;Acc:7139] | |
| FOXP1 | Forkhead box P1 | √ |
| FOXP2 | Forkhead box P2 [Source:HGNC Symbol;Acc:13875] | |
| FOXP4 | Forkhead box P4 [Source:HGNC Symbol;Acc:20842] | |
| FOXRED2 | FAD-dependent oxidoreductase domain containing 2 [Source:HGNC Symbol;Acc:26264] | |
| FPR2 | Formyl peptide receptor 2 [Source:HGNC Symbol;Acc:3827] | |
| FRA10AC1 | Fragile site, folic acid type, rare, fra(10)(q23.3) or fra(10)(q24.2) candidate 1 [Source:HGNC Symbol;Acc:1162] | |
| FRAS1 | Fraser syndrome 1 [Source:HGNC Symbol;Acc:19185] | |
| FRAT1 | Frequently rearranged in advanced T-cell lymphomas [Source:HGNC Symbol;Acc:3944] | |
| FREM1 | FRAS1 related extracellular matrix 1 [Source:HGNC Symbol;Acc:23399] | |
| FREM2 | FRAS1 related extracellular matrix protein 2 [Source:HGNC Symbol;Acc:25396] | |
| FRG1B | FSDH region gene 1 family, member B [Source:HGNC Symbol;Acc:15792] | |
| FRMD4A | FERM domain containing 4A [Source:HGNC Symbol;Acc:25491] | |
| FRMD8 | FERM domain containing 8 [Source:HGNC Symbol;Acc:25462] | |
| FRMPD1 | FERM and PDZ domain containing 1 [Source:HGNC Symbol;Acc:29159] | |
| FRMPD2 | FERM and PDZ domain containing 2 [Source:HGNC Symbol;Acc:28572] | |
| FRMPD4 | FERM and PDZ domain containing 4 [Source:HGNC Symbol;Acc:29007] | |
| FRRS1 | Ferric-chelate reductase 1 [Source:HGNC Symbol;Acc:27622] | |
| FRS2 | Fibroblast growth factor receptor substrate 2 [Source:HGNC Symbol;Acc:16971] | |
| FRY | Furry homolog (Drosophila) [Source:HGNC Symbol;Acc:20367] | |
| FRYL | FRY-like [Source:HGNC Symbol;Acc:29127] | |
| FSCB | Fibrous sheath CABYR binding protein [Source:HGNC Symbol;Acc:20494] | |
| FSCN3 | Fascin homolog 3, actin-bundling protein, testicular (Strongylocentrotus purpuratus) [Source:HGNC Symbol;Acc:3961] | |
| FSD1L | Fibronectin type III and SPRY domain containing 1-like [Source:HGNC Symbol;Acc:13753] | |
| FSIP1 | Fibrous sheath interacting protein 1 [Source:HGNC Symbol;Acc:21674] | |

| | | |
|---------------|---|--|
| FSIP2 | Fibrous sheath interacting protein 2 [Source:HGNC Symbol;Acc:21675] | |
| FST | Follistatin [Source:HGNC Symbol;Acc:3971] | |
| FSTL1 | Follistatin-like 1 [Source:HGNC Symbol;Acc:3972] | |
| FSTL4 | Follistatin-like 4 [Source:HGNC Symbol;Acc:21389] | |
| FTO | Fat mass and obesity associated [Source:HGNC Symbol;Acc:24678] | |
| FTSJ2 | Ftsj homolog 2 (E. Coli) [Source:HGNC Symbol;Acc:16352] | |
| FTSJD1 | Ftsj methyltransferase domain containing 1 [Source:HGNC Symbol;Acc:25635] | |
| FTSJD2 | Ftsj methyltransferase domain containing 2 [Source:HGNC Symbol;Acc:21077] | |
| FUCA1 | Fucosidase, alpha-L- 1, tissue [Source:HGNC Symbol;Acc:4006] | |
| FUCA2 | Fucosidase, alpha-L- 2, plasma [Source:HGNC Symbol;Acc:4008] | |
| FUNDC2 | FUN14 domain containing 2 [Source:HGNC Symbol;Acc:24925] | |
| FURIN | Furin (paired basic amino acid cleaving enzyme) [Source:HGNC Symbol;Acc:8568] | |
| FUT11 | Fucosyltransferase 11 (alpha (1,3) fucosyltransferase) [Source:HGNC Symbol;Acc:19233] | |
| FUT3 | Fucosyltransferase 3 (galactoside 3(4)-L-fucosyltransferase, Lewis blood group) [Source:HGNC Symbol;Acc:4014] | |
| FUT4 | Fucosyltransferase 4 (alpha (1,3) fucosyltransferase, myeloid-specific) [Source:HGNC Symbol;Acc:4015] | |
| FUT6 | Fucosyltransferase 6 (alpha (1,3) fucosyltransferase) [Source:HGNC Symbol;Acc:4017] | |
| FUT7 | Fucosyltransferase 7 (alpha (1,3) fucosyltransferase) [Source:HGNC Symbol;Acc:4018] | |
| FXC1 | Fracture callus 1 homolog (rat) [Source:HGNC Symbol;Acc:4022] | |
| FXYD4 | FXYD domain containing ion transport regulator 4 [Source:HGNC Symbol;Acc:4028] | |
| FYCO1 | FYVE and coiled-coil domain containing 1 [Source:HGNC Symbol;Acc:14673] | |
| FZD4 | Frizzled homolog 4 (Drosophila) [Source:HGNC Symbol;Acc:4042] | |
| FZD5 | Frizzled homolog 5 (Drosophila) [Source:HGNC Symbol;Acc:4043] | |
| GAA | Glucosidase, alpha; acid [Source:HGNC Symbol;Acc:4065] | |

| | | |
|----------------|--|--|
| GAB1 | GRB2-associated binding protein 1 [Source:HGNC Symbol;Acc:4066] | |
| GAB2 | GRB2-associated binding protein 2 [Source:HGNC Symbol;Acc:14458] | |
| GAB3 | GRB2-associated binding protein 3 [Source:HGNC Symbol;Acc:17515] | |
| GAB4 | GRB2-associated binding protein family, member 4 [Source:HGNC Symbol;Acc:18325] | |
| GABPB2 | GA binding protein transcription factor, beta subunit 2 [Source:HGNC Symbol;Acc:28441] | |
| GABRA1 | Gamma-aminobutyric acid (GABA) A receptor, alpha 1 [Source:HGNC Symbol;Acc:4075] | |
| GABRA4 | Gamma-aminobutyric acid (GABA) A receptor, alpha 4 [Source:HGNC Symbol;Acc:4078] | |
| GABRB1 | Gamma-aminobutyric acid (GABA) A receptor, beta 1 [Source:HGNC Symbol;Acc:4081] | |
| GABRB2 | Gamma-aminobutyric acid (GABA) A receptor, beta 2 [Source:HGNC Symbol;Acc:4082] | |
| GABRD | Gamma-aminobutyric acid (GABA) A receptor, delta [Source:HGNC Symbol;Acc:4084] | |
| GABRG1 | Gamma-aminobutyric acid (GABA) A receptor, gamma 1 [Source:HGNC Symbol;Acc:4086] | |
| GABRG3 | Gamma-aminobutyric acid (GABA) A receptor, gamma 3 [Source:HGNC Symbol;Acc:4088] | |
| GABRR1 | Gamma-aminobutyric acid (GABA) receptor, rho 1 [Source:HGNC Symbol;Acc:4090] | |
| GAD1 | Glutamate decarboxylase 1 (brain, 67kda) [Source:HGNC Symbol;Acc:4092] | |
| GADD45A | Growth arrest and DNA-damage-inducible, alpha [Source:HGNC Symbol;Acc:4095] | |
| GADD45B | Growth arrest and DNA-damage-inducible, beta [Source:HGNC Symbol;Acc:4096] | |
| GADL1 | Glutamate decarboxylase-like 1 [Source:HGNC Symbol;Acc:27949] | |
| GAGE1 | G antigen 1 [Source:HGNC Symbol;Acc:4098] | |
| GAGE12C | G antigen 12C [Source:HGNC Symbol;Acc:28402] | |
| GAGE12D | G antigen 12D [Source:HGNC Symbol;Acc:31904] | |

| | | |
|----------------|--|--|
| GAGE12E | G antigen 12E [Source:HGNC Symbol;Acc:31905] | |
| GAGE12F | G antigen 12F [Source:HGNC Symbol;Acc:31906] | |
| GAGE12G | G antigen 12G [Source:HGNC Symbol;Acc:31907] | |
| GAGE12I | G antigen 12I [Source:HGNC Symbol;Acc:4105] | |
| GAGE13 | G antigen 13 [Source:HGNC Symbol;Acc:29081] | |
| GAGE2A | G antigen 2A [Source:HGNC Symbol;Acc:4099] | |
| GAGE2B | G antigen 2B [Source:HGNC Symbol;Acc:31957] | |
| GAGE2C | G antigen 2C [Source:HGNC Symbol;Acc:31958] | |
| GAGE2D | G antigen 2D [Source:HGNC Symbol;Acc:31959] | |
| GAGE2E | G antigen 2E [Source:HGNC Symbol;Acc:31960] | |
| GAGE4 | G antigen 4 [Source:HGNC Symbol;Acc:4101] | |
| GAL3ST1 | Galactose-3-O-sulfotransferase 1 [Source:HGNC Symbol;Acc:24240] | |
| GALC | Galactosylceramidase [Source:HGNC Symbol;Acc:4115] | |
| GALK2 | Galactokinase 2 [Source:HGNC Symbol;Acc:4119] | |
| GALNT3 | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 3 (galnac-T3) [Source:HGNC Symbol;Acc:4125] | |
| GALNT5 | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 5 (galnac-T5) [Source:HGNC Symbol;Acc:4127] | |
| GALNT6 | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 6 (galnac-T6) [Source:HGNC Symbol;Acc:4128] | |
| GALNT9 | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 9 (galnac-T9) [Source:HGNC Symbol;Acc:4131] | |
| GALNTL1 | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 1 [Source:HGNC Symbol;Acc:23233] | |
| GALNTL2 | UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 2 [Source:HGNC Symbol;Acc:21531] | |
| GALR2 | Galanin receptor 2 [Source:HGNC Symbol;Acc:4133] | |
| GALR3 | Galanin receptor 3 [Source:HGNC Symbol;Acc:4134] | |
| GAN | Gigaxonin [Source:HGNC Symbol;Acc:4137] | |

| | | |
|----------------|--|---|
| GANAB | Glucosidase, alpha; neutral AB [Source:HGNC Symbol;Acc:4138] | |
| GANC | Glucosidase, alpha; neutral C [Source:HGNC Symbol;Acc:4139] | |
| GAPVD1 | Gtpase activating protein and VPS9 domains 1 [Source:HGNC Symbol;Acc:23375] | |
| GARNL3 | Gtpase activating Rap/rangap domain-like 3 [Source:HGNC Symbol;Acc:25425] | |
| GARS | Glycyl-trna synthetase [Source:HGNC Symbol;Acc:4162] | |
| GAS6 | Growth arrest-specific 6 [Source:HGNC Symbol;Acc:4168] | |
| GAS7 | Growth arrest-specific 7 | √ |
| GAS8 | Growth arrest-specific 8 [Source:HGNC Symbol;Acc:4166] | |
| GATA2 | GATA binding protein 2 | √ |
| GATA3 | GATA binding protein 3 | √ |
| GATAD2B | GATA zinc finger domain containing 2B [Source:HGNC Symbol;Acc:30778] | |
| GATM | Glycine amidinotransferase (L-arginine:glycine amidinotransferase) [Source:HGNC Symbol;Acc:4175] | |
| GATSL2 | GATS protein-like 2 [Source:HGNC Symbol;Acc:37073] | |
| GBA2 | Glucosidase, beta (bile acid) 2 [Source:HGNC Symbol;Acc:18986] | |
| GBF1 | Golgi brefeldin A resistant guanine nucleotide exchange factor 1 [Source:HGNC Symbol;Acc:4181] | |
| GBGT1 | Globoside alpha-1,3-N-acetylgalactosaminyltransferase 1 [Source:HGNC Symbol;Acc:20460] | |
| GBP4 | Guanylate binding protein 4 [Source:HGNC Symbol;Acc:20480] | |
| GC | Group-specific component (vitamin D binding protein) [Source:HGNC Symbol;Acc:4187] | |
| GCAT | Glycine C-acetyltransferase [Source:HGNC Symbol;Acc:4188] | |
| GCDH | Glutaryl-coa dehydrogenase [Source:HGNC Symbol;Acc:4189] | |
| GCFC1 | GC-rich sequence DNA-binding factor 1 [Source:HGNC Symbol;Acc:13579] | |
| GCN1L1 | GCN1 general control of amino-acid synthesis 1-like 1 (yeast) [Source:HGNC Symbol;Acc:4199] | |
| GCNT3 | Glucosaminyl (N-acetyl) transferase 3, mucin type [Source:HGNC Symbol;Acc:4205] | |

| | | |
|---------------|--|--|
| GCNT7 | Glucosaminyl (N-acetyl) transferase family member 7 [Source:HGNC Symbol;Acc:16099] | |
| GDA | Guanine deaminase [Source:HGNC Symbol;Acc:4212] | |
| GDF10 | Growth differentiation factor 10 [Source:HGNC Symbol;Acc:4215] | |
| GDF11 | Growth differentiation factor 11 [Source:HGNC Symbol;Acc:4216] | |
| GDF3 | Growth differentiation factor 3 [Source:HGNC Symbol;Acc:4218] | |
| GDF5 | Growth differentiation factor 5 [Source:HGNC Symbol;Acc:4220] | |
| GDF5OS | Growth differentiation factor 5 opposite strand [Source:HGNC Symbol;Acc:33435] | |
| GDF7 | Growth differentiation factor 7 [Source:HGNC Symbol;Acc:4222] | |
| GDI1 | GDP dissociation inhibitor 1 [Source:HGNC Symbol;Acc:4226] | |
| GDPD2 | Glycerophosphodiester phosphodiesterase domain containing 2 [Source:HGNC Symbol;Acc:25974] | |
| GEMIN7 | Gem (nuclear organelle) associated protein 7 [Source:HGNC Symbol;Acc:20045] | |
| GEN1 | Gen homolog 1, endonuclease (Drosophila) [Source:HGNC Symbol;Acc:26881] | |
| GFM1 | G elongation factor, mitochondrial 1 [Source:HGNC Symbol;Acc:13780] | |
| GFOD2 | Glucose-fructose oxidoreductase domain containing 2 [Source:HGNC Symbol;Acc:28159] | |
| GFPT1 | Glutamine--fructose-6-phosphate transaminase 1 [Source:HGNC Symbol;Acc:4241] | |
| GFRA2 | GDNF family receptor alpha 2 [Source:HGNC Symbol;Acc:4244] | |
| GGA3 | Golgi-associated, gamma adaptin ear containing, ARF binding protein 3 [Source:HGNC Symbol;Acc:17079] | |
| GGCX | Gamma-glutamyl carboxylase [Source:HGNC Symbol;Acc:4247] | |
| GGH | Gamma-glutamyl hydrolase (conjugase, foylpolypolyglutamyl hydrolase) [Source:HGNC Symbol;Acc:4248] | |
| GGT1 | Gamma-glutamyltransferase 1 [Source:HGNC Symbol;Acc:4250] | |
| GGT2 | Gamma-glutamyltransferase 2 [Source:HGNC Symbol;Acc:4251] | |
| GGT6 | Gamma-glutamyltransferase 6 [Source:HGNC Symbol;Acc:26891] | |
| GGT7 | Gamma-glutamyltransferase 7 [Source:HGNC Symbol;Acc:4259] | |
| GHDC | GH3 domain containing [Source:HGNC Symbol;Acc:24438] | |

| | | |
|---------------|--|--|
| GHR | Growth hormone receptor [Source:HGNC Symbol;Acc:4263] | |
| GHSR | Growth hormone secretagogue receptor [Source:HGNC Symbol;Acc:4267] | |
| GIGYF1 | GRB10 interacting GYF protein 1 [Source:HGNC Symbol;Acc:9126] | |
| GIGYF2 | GRB10 interacting GYF protein 2 [Source:HGNC Symbol;Acc:11960] | |
| GINS2 | GINS complex subunit 2 (Psf2 homolog) [Source:HGNC Symbol;Acc:24575] | |
| GIPC1 | GIPC PDZ domain containing family, member 1 [Source:HGNC Symbol;Acc:1226] | |
| GIPC2 | GIPC PDZ domain containing family, member 2 [Source:HGNC Symbol;Acc:18177] | |
| GIT1 | G protein-coupled receptor kinase interacting arfgap 1 [Source:HGNC Symbol;Acc:4272] | |
| GJB3 | Gap junction protein, beta 3, 31kda [Source:HGNC Symbol;Acc:4285] | |
| GJB4 | Gap junction protein, beta 4, 30.3kda [Source:HGNC Symbol;Acc:4286] | |
| GJB6 | Gap junction protein, beta 6, 30kda [Source:HGNC Symbol;Acc:4288] | |
| GJB7 | Gap junction protein, beta 7, 25kda [Source:HGNC Symbol;Acc:16690] | |
| GKN1 | Gastrokine 1 [Source:HGNC Symbol;Acc:23217] | |
| GLB1 | Galactosidase, beta 1 [Source:HGNC Symbol;Acc:4298] | |
| GLB1L | Galactosidase, beta 1-like [Source:HGNC Symbol;Acc:28129] | |
| GLB1L3 | Galactosidase, beta 1-like 3 [Source:HGNC Symbol;Acc:25147] | |
| GLG1 | Golgi glycoprotein 1 [Source:HGNC Symbol;Acc:4316] | |
| GLI2 | GLI family zinc finger 2 [Source:HGNC Symbol;Acc:4318] | |
| GLI3 | GLI family zinc finger 3 [Source:HGNC Symbol;Acc:4319] | |
| GLIPR1 | GLI pathogenesis-related 1 [Source:HGNC Symbol;Acc:17001] | |
| GLIS3 | GLIS family zinc finger 3 [Source:HGNC Symbol;Acc:28510] | |
| GLP2R | Glucagon-like peptide 2 receptor [Source:HGNC Symbol;Acc:4325] | |
| GLRA3 | Glycine receptor, alpha 3 [Source:HGNC Symbol;Acc:4328] | |
| GLRX | Glutaredoxin (thioltransferase) [Source:HGNC Symbol;Acc:4330] | |
| GLRX2 | Glutaredoxin 2 [Source:HGNC Symbol;Acc:16065] | |
| GLS | Glutaminase [Source:HGNC Symbol;Acc:4331] | |
| GLT1D1 | Glycosyltransferase 1 domain containing 1 [Source:HGNC Symbol;Acc:26483] | |

| | | |
|----------------|---|---|
| GLT25D2 | Glycosyltransferase 25 domain containing 2 [Source:HGNC Symbol;Acc:16790] | |
| GLT8D1 | Glycosyltransferase 8 domain containing 1 [Source:HGNC Symbol;Acc:24870] | |
| GLUD1 | Glutamate dehydrogenase 1 [Source:HGNC Symbol;Acc:4335] | |
| GLYAT | Glycine-N-acyltransferase [Source:HGNC Symbol;Acc:13734] | |
| GLYATL2 | Glycine-N-acyltransferase-like 2 [Source:HGNC Symbol;Acc:24178] | |
| GLYR1 | Glyoxylate reductase 1 homolog (Arabidopsis) [Source:HGNC Symbol;Acc:24434] | |
| GMDS | GDP-mannose 4,6-dehydratase [Source:HGNC Symbol;Acc:4369] | |
| GMEB2 | Glucocorticoid modulatory element binding protein 2 [Source:HGNC Symbol;Acc:4371] | |
| GMFB | Glia maturation factor, beta [Source:HGNC Symbol;Acc:4373] | |
| GMIP | GEM interacting protein [Source:HGNC Symbol;Acc:24852] | |
| GMPPB | GDP-mannose pyrophosphorylase B [Source:HGNC Symbol;Acc:22932] | |
| GMPR2 | Guanosine monophosphate reductase 2 [Source:HGNC Symbol;Acc:4377] | |
| GNA12 | Guanine nucleotide binding protein (G protein) alpha 12 [Source:HGNC Symbol;Acc:4380] | |
| GNA14 | Guanine nucleotide binding protein (G protein), alpha 14 [Source:HGNC Symbol;Acc:4382] | |
| GNAI2 | Guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 2 [Source:HGNC Symbol;Acc:4385] | |
| GNAI3 | Guanine nucleotide binding protein (G protein), alpha inhibiting activity polypeptide 3 [Source:HGNC Symbol;Acc:4387] | |
| GNAL | Guanine nucleotide binding protein (G protein), alpha activating activity polypeptide, olfactory type [Source:HGNC Symbol;Acc:4388] | |
| GNAO1 | Guanine nucleotide binding protein (G protein), alpha activating activity polypeptide O [Source:HGNC Symbol;Acc:4389] | |
| GNAQ | Guanine nucleotide binding protein (G protein), q polypeptide | √ |
| GNAS | GNAS complex locus | √ |
| GNB1L | Guanine nucleotide binding protein (G protein), beta polypeptide 1-like [Source:HGNC Symbol;Acc:4397] | |

| | | |
|-----------------|---|---|
| GNB5 | Guanine nucleotide binding protein (G protein), beta 5 [Source:HGNC Symbol;Acc:4401] | |
| GNG4 | Guanine nucleotide binding protein (G protein), gamma 4 [Source:HGNC Symbol;Acc:4407] | |
| GNG5 | Guanine nucleotide binding protein (G protein), gamma 5 [Source:HGNC Symbol;Acc:4408] | |
| GNL1 | Guanine nucleotide binding protein-like 1 [Source:HGNC Symbol;Acc:4413] | |
| GNL3L | Guanine nucleotide binding protein-like 3 (nucleolar)-like [Source:HGNC Symbol;Acc:25553] | |
| GNMT | Glycine N-methyltransferase [Source:HGNC Symbol;Acc:4415] | |
| GNPTAB | N-acetylglucosamine-1-phosphate transferase, alpha and beta subunits [Source:HGNC Symbol;Acc:29670] | |
| GNS | Glucosamine (N-acetyl)-6-sulfatase [Source:HGNC Symbol;Acc:4422] | |
| GOLGA3 | Golgin A3 [Source:HGNC Symbol;Acc:4426] | |
| GOLGA4 | Golgin A4 [Source:HGNC Symbol;Acc:4427] | |
| GOLGA5 | Golgin A5 | √ |
| GOLGA6A | Golgin A6 family, member A [Source:HGNC Symbol;Acc:13567] | |
| GOLGA6L9 | Golgin A6 family-like 9 [Source:HGNC Symbol;Acc:37229] | |
| GOLGA7 | Golgin A7 [Source:HGNC Symbol;Acc:24876] | |
| GOLGA8A | Golgin A8 family, member A [Source:HGNC Symbol;Acc:31972] | |
| GOLGA8B | Golgin A8 family, member B [Source:HGNC Symbol;Acc:31973] | |
| GOLGB1 | Golgin B1 [Source:HGNC Symbol;Acc:4429] | |
| GOLT1B | Golgi transport 1B [Source:HGNC Symbol;Acc:20175] | |
| GORAB | Golgin, RAB6-interacting [Source:HGNC Symbol;Acc:25676] | |
| GORASP1 | Golgi reassembly stacking protein 1, 65kda [Source:HGNC Symbol;Acc:16769] | |
| GOSR1 | Golgi SNAP receptor complex member 1 [Source:HGNC Symbol;Acc:4430] | |
| GOSR2 | Golgi SNAP receptor complex member 2 [Source:HGNC Symbol;Acc:4431] | |
| GOT2 | Glutamic-oxaloacetic transaminase 2, mitochondrial (aspartate aminotransferase 2) [Source:HGNC Symbol;Acc:4433] | |

| | | |
|----------------|---|---|
| GP1BA | Glycoprotein Ib (platelet), alpha polypeptide [Source:HGNC Symbol;Acc:4439] | |
| GP2 | Glycoprotein 2 (zymogen granule membrane) [Source:HGNC Symbol;Acc:4441] | |
| GPAA1 | Glycosylphosphatidylinositol anchor attachment protein 1 homolog (yeast) [Source:HGNC Symbol;Acc:4446] | |
| GPAM | Glycerol-3-phosphate acyltransferase, mitochondrial [Source:HGNC Symbol;Acc:24865] | |
| GPAT2 | Glycerol-3-phosphate acyltransferase 2, mitochondrial [Source:HGNC Symbol;Acc:27168] | |
| GPATCH1 | G patch domain containing 1 [Source:HGNC Symbol;Acc:24658] | |
| GPBAR1 | G protein-coupled bile acid receptor 1 [Source:HGNC Symbol;Acc:19680] | |
| GPBP1 | GC-rich promoter binding protein 1 [Source:HGNC Symbol;Acc:29520] | |
| GPBP1L1 | GC-rich promoter binding protein 1-like 1 [Source:HGNC Symbol;Acc:28843] | |
| GPC1 | Glypican 1 [Source:HGNC Symbol;Acc:4449] | |
| GPC5 | Glypican 5 [Source:HGNC Symbol;Acc:4453] | |
| GPD1 | Glycerol-3-phosphate dehydrogenase 1 (soluble) [Source:HGNC Symbol;Acc:4455] | |
| GPHN | Gephyrin | √ |
| GPIHBP1 | Glycosylphosphatidylinositol anchored high density lipoprotein binding protein 1 [Source:HGNC Symbol;Acc:24945] | |
| GPLD1 | Glycosylphosphatidylinositol specific phospholipase D1 [Source:HGNC Symbol;Acc:4459] | |
| GPM6A | Glycoprotein M6A [Source:HGNC Symbol;Acc:4460] | |
| GPM6B | Glycoprotein M6B [Source:HGNC Symbol;Acc:4461] | |
| GPN1 | GPN-loop gtpase 1 [Source:HGNC Symbol;Acc:17030] | |
| GPR107 | G protein-coupled receptor 107 [Source:HGNC Symbol;Acc:17830] | |
| GPR109A | G protein-coupled receptor 109A [Source:HGNC Symbol;Acc:24827] | |
| GPR110 | G protein-coupled receptor 110 [Source:HGNC Symbol;Acc:18990] | |
| GPR111 | G protein-coupled receptor 111 [Source:HGNC Symbol;Acc:18991] | |
| GPR112 | G protein-coupled receptor 112 [Source:HGNC Symbol;Acc:18992] | |
| GPR116 | G protein-coupled receptor 116 [Source:HGNC Symbol;Acc:19030] | |

| | | |
|---------------|---|--|
| GPR120 | G protein-coupled receptor 120 [Source:HGNC Symbol;Acc:19061] | |
| GPR123 | G protein-coupled receptor 123 [Source:HGNC Symbol;Acc:13838] | |
| GPR124 | G protein-coupled receptor 124 [Source:HGNC Symbol;Acc:17849] | |
| GPR125 | G protein-coupled receptor 125 [Source:HGNC Symbol;Acc:13839] | |
| GPR126 | G protein-coupled receptor 126 [Source:HGNC Symbol;Acc:13841] | |
| GPR141 | G protein-coupled receptor 141 [Source:HGNC Symbol;Acc:19997] | |
| GPR15 | G protein-coupled receptor 15 [Source:HGNC Symbol;Acc:4469] | |
| GPR151 | G protein-coupled receptor 151 [Source:HGNC Symbol;Acc:23624] | |
| GPR155 | G protein-coupled receptor 155 [Source:HGNC Symbol;Acc:22951] | |
| GPR157 | G protein-coupled receptor 157 [Source:HGNC Symbol;Acc:23687] | |
| GPR160 | G protein-coupled receptor 160 [Source:HGNC Symbol;Acc:23693] | |
| GPR162 | G protein-coupled receptor 162 [Source:HGNC Symbol;Acc:16693] | |
| GPR17 | G protein-coupled receptor 17 [Source:HGNC Symbol;Acc:4471] | |
| GPR171 | G protein-coupled receptor 171 [Source:HGNC Symbol;Acc:30057] | |
| GPR176 | G protein-coupled receptor 176 [Source:HGNC Symbol;Acc:32370] | |
| GPR179 | G protein-coupled receptor 179 [Source:HGNC Symbol;Acc:31371] | |
| GPR18 | G protein-coupled receptor 18 [Source:HGNC Symbol;Acc:4472] | |
| GPR22 | G protein-coupled receptor 22 [Source:HGNC Symbol;Acc:4477] | |
| GPR3 | G protein-coupled receptor 3 [Source:HGNC Symbol;Acc:4484] | |
| GPR35 | G protein-coupled receptor 35 [Source:HGNC Symbol;Acc:4492] | |
| GPR39 | G protein-coupled receptor 39 [Source:HGNC Symbol;Acc:4496] | |
| GPR50 | G protein-coupled receptor 50 [Source:HGNC Symbol;Acc:4506] | |
| GPR55 | G protein-coupled receptor 55 [Source:HGNC Symbol;Acc:4511] | |
| GPR56 | G protein-coupled receptor 56 [Source:HGNC Symbol;Acc:4512] | |
| GPR61 | G protein-coupled receptor 61 [Source:HGNC Symbol;Acc:13300] | |
| GPR64 | G protein-coupled receptor 64 [Source:HGNC Symbol;Acc:4516] | |
| GPR75 | G protein-coupled receptor 75 [Source:HGNC Symbol;Acc:4526] | |
| GPR81 | G protein-coupled receptor 81 [Source:HGNC Symbol;Acc:4532] | |
| GPR87 | G protein-coupled receptor 87 [Source:HGNC Symbol;Acc:4538] | |
| GPR88 | G protein-coupled receptor 88 [Source:HGNC Symbol;Acc:4539] | |
| GPR97 | G protein-coupled receptor 97 [Source:HGNC Symbol;Acc:13728] | |
| GPR98 | G protein-coupled receptor 98 [Source:HGNC Symbol;Acc:17416] | |

| | | |
|----------------|--|--|
| GPRASP2 | G protein-coupled receptor associated sorting protein 2 [Source:HGNC Symbol;Acc:25169] | |
| GPRC5A | G protein-coupled receptor, family C, group 5, member A [Source:HGNC Symbol;Acc:9836] | |
| GPRC5C | G protein-coupled receptor, family C, group 5, member C [Source:HGNC Symbol;Acc:13309] | |
| GPRC5D | G protein-coupled receptor, family C, group 5, member D [Source:HGNC Symbol;Acc:13310] | |
| GPRIN1 | G protein regulated inducer of neurite outgrowth 1 [Source:HGNC Symbol;Acc:24835] | |
| GPRIN2 | G protein regulated inducer of neurite outgrowth 2 [Source:HGNC Symbol;Acc:23730] | |
| GPRIN3 | GPRIN family member 3 [Source:HGNC Symbol;Acc:27733] | |
| GPS1 | G protein pathway suppressor 1 [Source:HGNC Symbol;Acc:4549] | |
| GPS2 | G protein pathway suppressor 2 [Source:HGNC Symbol;Acc:4550] | |
| GPSM2 | G-protein signaling modulator 2 [Source:HGNC Symbol;Acc:29501] | |
| GPT2 | Glutamic pyruvate transaminase (alanine aminotransferase) 2 [Source:HGNC Symbol;Acc:18062] | |
| GPX4 | Glutathione peroxidase 4 (phospholipid hydroperoxidase) [Source:HGNC Symbol;Acc:4556] | |
| GRAMD1B | GRAM domain containing 1B [Source:HGNC Symbol;Acc:29214] | |
| GRAMD4 | GRAM domain containing 4 [Source:HGNC Symbol;Acc:29113] | |
| GRAP2 | GRB2-related adaptor protein 2 [Source:HGNC Symbol;Acc:4563] | |
| GRB10 | Growth factor receptor-bound protein 10 [Source:HGNC Symbol;Acc:4564] | |
| GREB1 | Growth regulation by estrogen in breast cancer 1 [Source:HGNC Symbol;Acc:24885] | |
| GREB1L | Growth regulation by estrogen in breast cancer-like [Source:HGNC Symbol;Acc:31042] | |
| GREM1 | Gremlin 1 [Source:HGNC Symbol;Acc:2001] | |
| GREM2 | Gremlin 2 [Source:HGNC Symbol;Acc:17655] | |
| GRHL3 | Grainyhead-like 3 (Drosophila) [Source:HGNC Symbol;Acc:25839] | |

| | | |
|----------------|--|--|
| GRIA1 | Glutamate receptor, ionotropic, AMPA 1 [Source:HGNC Symbol;Acc:4571] | |
| GRIA3 | Glutamate receptor, ionotropic, AMPA 3 [Source:HGNC Symbol;Acc:4573] | |
| GRIA4 | Glutamate receptor, ionotropic, AMPA 4 [Source:HGNC Symbol;Acc:4574] | |
| GRID1 | Glutamate receptor, ionotropic, delta 1 [Source:HGNC Symbol;Acc:4575] | |
| GRID2 | Glutamate receptor, ionotropic, delta 2 [Source:HGNC Symbol;Acc:4576] | |
| GRID2IP | Glutamate receptor, ionotropic, delta 2 (Grid2) interacting protein [Source:HGNC Symbol;Acc:18464] | |
| GRIK2 | Glutamate receptor, ionotropic, kainate 2 [Source:HGNC Symbol;Acc:4580] | |
| GRIK3 | Glutamate receptor, ionotropic, kainate 3 [Source:HGNC Symbol;Acc:4581] | |
| GRIK5 | Glutamate receptor, ionotropic, kainate 5 [Source:HGNC Symbol;Acc:4583] | |
| GRIN1 | Glutamate receptor, ionotropic, N-methyl D-aspartate 1 [Source:HGNC Symbol;Acc:4584] | |
| GRIN2A | Glutamate receptor, ionotropic, N-methyl D-aspartate 2A [Source:HGNC Symbol;Acc:4585] | |
| GRIN2B | Glutamate receptor, ionotropic, N-methyl D-aspartate 2B [Source:HGNC Symbol;Acc:4586] | |
| GRIN3A | Glutamate receptor, ionotropic, N-methyl-D-aspartate 3A [Source:HGNC Symbol;Acc:16767] | |
| GRK5 | G protein-coupled receptor kinase 5 [Source:HGNC Symbol;Acc:4544] | |
| GRM1 | Glutamate receptor, metabotropic 1 [Source:HGNC Symbol;Acc:4593] | |
| GRM4 | Glutamate receptor, metabotropic 4 [Source:HGNC Symbol;Acc:4596] | |
| GRM5 | Glutamate receptor, metabotropic 5 [Source:HGNC Symbol;Acc:4597] | |
| GRM8 | Glutamate receptor, metabotropic 8 [Source:HGNC Symbol;Acc:4600] | |
| GRN | Granulin [Source:HGNC Symbol;Acc:4601] | |
| GRPEL1 | Grpe-like 1, mitochondrial (E. Coli) [Source:HGNC Symbol;Acc:19696] | |
| GRPEL2 | Grpe-like 2, mitochondrial (E. Coli) [Source:HGNC Symbol;Acc:21060] | |
| GRSF1 | G-rich RNA sequence binding factor 1 [Source:HGNC Symbol;Acc:4610] | |

| | | |
|----------------|--|--|
| GRWD1 | Glutamate-rich WD repeat containing 1 [Source:HGNC Symbol;Acc:21270] | |
| GSDMA | Gasdermin A [Source:HGNC Symbol;Acc:13311] | |
| GSDMC | Gasdermin C [Source:HGNC Symbol;Acc:7151] | |
| GSDMD | Gasdermin D [Source:HGNC Symbol;Acc:25697] | |
| GSG1L | GSG1-like [Source:HGNC Symbol;Acc:28283] | |
| GSK3A | Glycogen synthase kinase 3 alpha [Source:HGNC Symbol;Acc:4616] | |
| GSN | Gelsolin [Source:HGNC Symbol;Acc:4620] | |
| GSPT1 | G1 to S phase transition 1 [Source:HGNC Symbol;Acc:4621] | |
| GSPT2 | G1 to S phase transition 2 [Source:HGNC Symbol;Acc:4622] | |
| GSR | Glutathione reductase [Source:HGNC Symbol;Acc:4623] | |
| GSS | Glutathione synthetase [Source:HGNC Symbol;Acc:4624] | |
| GSTK1 | Glutathione S-transferase kappa 1 [Source:HGNC Symbol;Acc:16906] | |
| GSTM3 | Glutathione S-transferase mu 3 (brain) [Source:HGNC Symbol;Acc:4635] | |
| GSTM5 | Glutathione S-transferase mu 5 [Source:HGNC Symbol;Acc:4637] | |
| GSTT1 | Glutathione S-transferase theta 1 [Source:HGNC Symbol;Acc:4641] | |
| GTF2B | General transcription factor IIB [Source:HGNC Symbol;Acc:4648] | |
| GTF2E1 | General transcription factor IIE, polypeptide 1, alpha 56kda [Source:HGNC Symbol;Acc:4650] | |
| GTF2E2 | General transcription factor IIE, polypeptide 2, beta 34kda [Source:HGNC Symbol;Acc:4651] | |
| GTF3C1 | General transcription factor IIIC, polypeptide 1, alpha 220kda [Source:HGNC Symbol;Acc:4664] | |
| GTF3C3 | General transcription factor IIIC, polypeptide 3, 102kda [Source:HGNC Symbol;Acc:4666] | |
| GTF3C4 | General transcription factor IIIC, polypeptide 4, 90kda [Source:HGNC Symbol;Acc:4667] | |
| GTF3C5 | General transcription factor IIIC, polypeptide 5, 63kda [Source:HGNC Symbol;Acc:4668] | |
| GTPBP1 | GTP binding protein 1 [Source:HGNC Symbol;Acc:4669] | |
| GTPBP2 | GTP binding protein 2 [Source:HGNC Symbol;Acc:4670] | |
| GUCA1B | Guanylate cyclase activator 1B (retina) [Source:HGNC Symbol;Acc:4679] | |
| GUCY1A3 | Guanylate cyclase 1, soluble, alpha 3 [Source:HGNC Symbol;Acc:4685] | |
| GUCY2F | Guanylate cyclase 2F, retinal [Source:HGNC Symbol;Acc:4691] | |

| | | |
|----------------|--|--|
| GUK1 | Guanylate kinase 1 [Source:HGNC Symbol;Acc:4693] | |
| GUSB | Glucuronidase, beta [Source:HGNC Symbol;Acc:4696] | |
| GXYLT1 | Glucoside xylosyltransferase 1 [Source:HGNC Symbol;Acc:27482] | |
| GYG2 | Glycogenin 2 [Source:HGNC Symbol;Acc:4700] | |
| GYLTL1B | Glycosyltransferase-like 1B [Source:HGNC Symbol;Acc:16522] | |
| GYPC | Glycophorin C (Gerbich blood group) [Source:HGNC Symbol;Acc:4704] | |
| GYS2 | Glycogen synthase 2 (liver) [Source:HGNC Symbol;Acc:4707] | |
| H1F0 | H1 histone family, member 0 [Source:HGNC Symbol;Acc:4714] | |
| H2AFY | H2A histone family, member Y [Source:HGNC Symbol;Acc:4740] | |
| H2AFZ | H2A histone family, member Z [Source:HGNC Symbol;Acc:4741] | |
| H6PD | Hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase) [Source:HGNC Symbol;Acc:4795] | |
| HACL1 | 2-hydroxyacyl-coa lyase 1 [Source:HGNC Symbol;Acc:17856] | |
| HADHA | Hydroxyacyl-coa dehydrogenase/3-ketoacyl-coa thiolase/enoyl-coa hydratase (trifunctional protein), alpha subunit [Source:HGNC Symbol;Acc:4801] | |
| HADHB | Hydroxyacyl-coa dehydrogenase/3-ketoacyl-coa thiolase/enoyl-coa hydratase (trifunctional protein), beta subunit [Source:HGNC Symbol;Acc:4803] | |
| HAMP | Hepcidin antimicrobial peptide [Source:HGNC Symbol;Acc:15598] | |
| HAND2 | Heart and neural crest derivatives expressed 2 [Source:HGNC Symbol;Acc:4808] | |
| HAO1 | Hydroxyacid oxidase (glycolate oxidase) 1 [Source:HGNC Symbol;Acc:4809] | |
| HAPLN1 | Hyaluronan and proteoglycan link protein 1 [Source:HGNC Symbol;Acc:2380] | |
| HARS | Histidyl-trna synthetase [Source:HGNC Symbol;Acc:4816] | |
| HARS2 | Histidyl-trna synthetase 2, mitochondrial (putative) [Source:HGNC Symbol;Acc:4817] | |
| HAS3 | Hyaluronan synthase 3 [Source:HGNC Symbol;Acc:4820] | |
| HAUS3 | HAUS augmin-like complex, subunit 3 [Source:HGNC Symbol;Acc:28719] | |
| HAUS4 | HAUS augmin-like complex, subunit 4 [Source:HGNC Symbol;Acc:20163] | |
| HAUS5 | HAUS augmin-like complex, subunit 5 [Source:HGNC Symbol;Acc:29130] | |

| | | |
|----------------|--|--|
| HAUS6 | HAUS augmin-like complex, subunit 6 [Source:HGNC Symbol;Acc:25948] | |
| HBEGF | Heparin-binding EGF-like growth factor [Source:HGNC Symbol;Acc:3059] | |
| HBXIP | Hepatitis B virus x interacting protein [Source:HGNC Symbol;Acc:17955] | |
| HCN2 | Hyperpolarization activated cyclic nucleotide-gated potassium channel 2 [Source:HGNC Symbol;Acc:4846] | |
| HCN3 | Hyperpolarization activated cyclic nucleotide-gated potassium channel 3 [Source:HGNC Symbol;Acc:19183] | |
| HCN4 | Hyperpolarization activated cyclic nucleotide-gated potassium channel 4 [Source:HGNC Symbol;Acc:16882] | |
| HDAC10 | Histone deacetylase 10 [Source:HGNC Symbol;Acc:18128] | |
| HDAC2 | Histone deacetylase 2 [Source:HGNC Symbol;Acc:4853] | |
| HDAC4 | Histone deacetylase 4 [Source:HGNC Symbol;Acc:14063] | |
| HDAC5 | Histone deacetylase 5 [Source:HGNC Symbol;Acc:14068] | |
| HDAC6 | Histone deacetylase 6 [Source:HGNC Symbol;Acc:14064] | |
| HDAC7 | Histone deacetylase 7 [Source:HGNC Symbol;Acc:14067] | |
| HDAC8 | Histone deacetylase 8 [Source:HGNC Symbol;Acc:13315] | |
| HDAC9 | Histone deacetylase 9 [Source:HGNC Symbol;Acc:14065] | |
| HDHD1 | Haloacid dehalogenase-like hydrolase domain containing 1 [Source:HGNC Symbol;Acc:16818] | |
| HDHD2 | Haloacid dehalogenase-like hydrolase domain containing 2 [Source:HGNC Symbol;Acc:25364] | |
| HEATR1 | HEAT repeat containing 1 [Source:HGNC Symbol;Acc:25517] | |
| HEATR2 | HEAT repeat containing 2 [Source:HGNC Symbol;Acc:26013] | |
| HEATR5A | HEAT repeat containing 5A [Source:HGNC Symbol;Acc:20276] | |
| HEATR6 | HEAT repeat containing 6 [Source:HGNC Symbol;Acc:24076] | |
| HEATR7A | HEAT repeat containing 7A [Source:HGNC Symbol;Acc:26958] | |
| HECTD3 | HECT domain containing 3 [Source:HGNC Symbol;Acc:26117] | |
| HEG1 | HEG homolog 1 (zebrafish) [Source:HGNC Symbol;Acc:29227] | |
| HELB | Helicase (DNA) B [Source:HGNC Symbol;Acc:17196] | |
| HELLS | Helicase, lymphoid-specific [Source:HGNC Symbol;Acc:4861] | |
| HELZ | Helicase with zinc finger [Source:HGNC Symbol;Acc:16878] | |
| HEMK1 | Hemk methyltransferase family member 1 [Source:HGNC Symbol;Acc:24923] | |

| | | |
|----------------|---|---|
| HENMT1 | HEN1 methyltransferase homolog 1 (Arabidopsis) [Source:HGNC Symbol;Acc:26400] | |
| HEPH | Hephaestin [Source:HGNC Symbol;Acc:4866] | |
| HERC1 | Hect (homologous to the E6-AP (UBE3A) carboxyl terminus) domain and RCC1 (CHC1)-like domain (RLD) 1 [Source:HGNC Symbol;Acc:4867] | |
| HERC2 | Hect domain and RLD 2 [Source:HGNC Symbol;Acc:4868] | |
| HERC4 | Hect domain and RLD 4 [Source:HGNC Symbol;Acc:24521] | |
| HERC6 | Hect domain and RLD 6 [Source:HGNC Symbol;Acc:26072] | |
| HERPUD1 | Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1 | √ |
| HERPUD1 | Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1 [Source:HGNC Symbol;Acc:13744] | |
| HEXB | Hexosaminidase B (beta polypeptide) [Source:HGNC Symbol;Acc:4879] | |
| HEXIM1 | Hexamethylene bis-acetamide inducible 1 [Source:HGNC Symbol;Acc:24953] | |
| HEYL | Hairy/enhancer-of-split related with YRPW motif-like [Source:HGNC Symbol;Acc:4882] | |
| HFE | Hemochromatosis [Source:HGNC Symbol;Acc:4886] | |
| HGF | Hepatocyte growth factor (hepapoietin A; scatter factor) [Source:HGNC Symbol;Acc:4893] | |
| HGSNAT | Heparan-alpha-glucosaminide N-acetyltransferase [Source:HGNC Symbol;Acc:26527] | |
| HHAT | Hedgehog acyltransferase [Source:HGNC Symbol;Acc:18270] | |
| HHIP | Hedgehog interacting protein [Source:HGNC Symbol;Acc:14866] | |
| HHIPL2 | HHIP-like 2 [Source:HGNC Symbol;Acc:25842] | |
| HHLA1 | HERV-H LTR-associating 1 [Source:HGNC Symbol;Acc:4904] | |
| HHLA2 | HERV-H LTR-associating 2 [Source:HGNC Symbol;Acc:4905] | |
| HIAT1 | Hippocampus abundant transcript 1 [Source:HGNC Symbol;Acc:23363] | |
| HIC1 | Hypermethylated in cancer 1 [Source:HGNC Symbol;Acc:4909] | |
| HIC2 | Hypermethylated in cancer 2 [Source:HGNC Symbol;Acc:18595] | |
| HIF1AN | Hypoxia inducible factor 1, alpha subunit inhibitor [Source:HGNC Symbol;Acc:17113] | |

| | | |
|-----------------|--|---|
| HIF3A | Hypoxia inducible factor 3, alpha subunit [Source:HGNC Symbol;Acc:15825] | |
| HIGD2A | HIG1 hypoxia inducible domain family, member 2A [Source:HGNC Symbol;Acc:28311] | |
| HINT1 | Histidine triad nucleotide binding protein 1 [Source:HGNC Symbol;Acc:4912] | |
| HINT3 | Histidine triad nucleotide binding protein 3 [Source:HGNC Symbol;Acc:18468] | |
| HIP1 | Huntingtin interacting protein 1 | √ |
| HIPK1 | Homeodomain interacting protein kinase 1 [Source:HGNC Symbol;Acc:19006] | |
| HIPK2 | Homeodomain interacting protein kinase 2 [Source:HGNC Symbol;Acc:14402] | |
| HIPK4 | Homeodomain interacting protein kinase 4 [Source:HGNC Symbol;Acc:19007] | |
| HIRA | HIR histone cell cycle regulation defective homolog A (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:4916] | |
| HIST1H4A | Histone cluster 1, H4a [Source:HGNC Symbol;Acc:4781] | |
| HIST1H4E | Histone cluster 1, H4e [Source:HGNC Symbol;Acc:4790] | |
| HIST1H4F | Histone cluster 1, H4f [Source:HGNC Symbol;Acc:4783] | |
| HIST1H4H | Histone cluster 1, H4h [Source:HGNC Symbol;Acc:4788] | |
| HIST2H3A | Histone cluster 2, H3a [Source:HGNC Symbol;Acc:20505] | |
| HIST2H3C | Histone cluster 2, H3c [Source:HGNC Symbol;Acc:20503] | |
| HIST2H4A | Histone cluster 2, H4a [Source:HGNC Symbol;Acc:4794] | |
| HIST2H4B | Histone cluster 2, H4b [Source:HGNC Symbol;Acc:29607] | |
| HIST4H4 | Histone cluster 4, H4 [Source:HGNC Symbol;Acc:20510] | |
| HIVEP1 | Human immunodeficiency virus type I enhancer binding protein 1 [Source:HGNC Symbol;Acc:4920] | |
| HIVEP2 | Human immunodeficiency virus type I enhancer binding protein 2 [Source:HGNC Symbol;Acc:4921] | |
| HIVEP3 | Human immunodeficiency virus type I enhancer binding protein 3 [Source:HGNC Symbol;Acc:13561] | |
| HKDC1 | Hexokinase domain containing 1 [Source:HGNC Symbol;Acc:23302] | |

| | | |
|-----------------|--|---|
| HLA-DMB | Major histocompatibility complex, class II, DM beta [Source:HGNC Symbol;Acc:4935] | |
| HLA-DOA | Major histocompatibility complex, class II, DO alpha [Source:HGNC Symbol;Acc:4936] | |
| HLA-DPB1 | Major histocompatibility complex, class II, DP beta 1 [Source:HGNC Symbol;Acc:4940] | |
| HLA-DQA2 | Major histocompatibility complex, class II, DQ alpha 2 [Source:HGNC Symbol;Acc:4943] | |
| HLA-E | Major histocompatibility complex, class I, E [Source:HGNC Symbol;Acc:4962] | |
| HLA-G | Major histocompatibility complex, class I, G [Source:HGNC Symbol;Acc:4964] | |
| HLA-L | Major histocompatibility complex, class I, L, pseudogene [Source:HGNC Symbol;Acc:4970] | |
| HLCS | Holocarboxylase synthetase (biotin-(propionyl-coa-carboxylase (ATP-hydrolysing)) ligase) [Source:HGNC Symbol;Acc:4976] | |
| HLTF | Helicase-like transcription factor [Source:HGNC Symbol;Acc:11099] | |
| HLX | H2.0-like homeobox [Source:HGNC Symbol;Acc:4978] | |
| HMBOX1 | Homeobox containing 1 [Source:HGNC Symbol;Acc:26137] | |
| HMCN1 | Hemicentin 1 [Source:HGNC Symbol;Acc:19194] | |
| HMGA1 | High mobility group AT-hook 1 | √ |
| HMGA2 | High mobility group AT-hook 2 | √ |
| HMGB1 | High-mobility group box 1 [Source:HGNC Symbol;Acc:4983] | |
| HMGB2 | High-mobility group box 2 [Source:HGNC Symbol;Acc:5000] | |
| HMGB3 | High-mobility group box 3 [Source:HGNC Symbol;Acc:5004] | |
| HMGB4 | High-mobility group box 4 [Source:HGNC Symbol;Acc:24954] | |
| HMGCR | 3-hydroxy-3-methylglutaryl-coa reductase [Source:HGNC Symbol;Acc:5006] | |
| HMHA1 | Histocompatibility (minor) HA-1 [Source:HGNC Symbol;Acc:17102] | |
| HNF1A | HNF1 homeobox A [Source:HGNC Symbol;Acc:11621] | |
| HNF4A | Hepatocyte nuclear factor 4, alpha [Source:HGNC Symbol;Acc:5024] | |
| HNF4G | Hepatocyte nuclear factor 4, gamma [Source:HGNC Symbol;Acc:5026] | |

| | | |
|----------------|--|---|
| HNRNPF | Heterogeneous nuclear ribonucleoprotein F [Source:HGNC Symbol;Acc:5039] | |
| HNRNPH1 | Heterogeneous nuclear ribonucleoprotein H1 (H) [Source:HGNC Symbol;Acc:5041] | |
| HNRNPH2 | Heterogeneous nuclear ribonucleoprotein H2 (H') [Source:HGNC Symbol;Acc:5042] | |
| HNRNPK | Heterogeneous nuclear ribonucleoprotein K [Source:HGNC Symbol;Acc:5044] | |
| HNRNPR | Heterogeneous nuclear ribonucleoprotein R [Source:HGNC Symbol;Acc:5047] | |
| HNRNPU | Heterogeneous nuclear ribonucleoprotein U (scaffold attachment factor A) [Source:HGNC Symbol;Acc:5048] | |
| HNRPLL | Heterogeneous nuclear ribonucleoprotein L-like [Source:HGNC Symbol;Acc:25127] | |
| HOMER1 | Homer homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:17512] | |
| HOOK1 | Hook homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:19884] | |
| HOXA1 | Homeobox A1 [Source:HGNC Symbol;Acc:5099] | |
| HOXA7 | Homeobox A7 [Source:HGNC Symbol;Acc:5108] | |
| HOXB4 | Homeobox B4 [Source:HGNC Symbol;Acc:5115] | |
| HOXB5 | Homeobox B5 [Source:HGNC Symbol;Acc:5116] | |
| HOXC10 | Homeobox C10 [Source:HGNC Symbol;Acc:5122] | |
| HOXC6 | Homeobox C6 [Source:HGNC Symbol;Acc:5128] | |
| HOXD10 | Homeobox D10 [Source:HGNC Symbol;Acc:5133] | |
| HOXD8 | Homeobox D8 [Source:HGNC Symbol;Acc:5139] | |
| HOXD9 | Homeobox D9 [Source:HGNC Symbol;Acc:5140] | |
| HPCAL4 | Hippocalcin like 4 [Source:HGNC Symbol;Acc:18212] | |
| HPS3 | Hermansky-Pudlak syndrome 3 [Source:HGNC Symbol;Acc:15597] | |
| HPX | Hemopexin [Source:HGNC Symbol;Acc:5171] | |
| HR | Hairless homolog (mouse) [Source:HGNC Symbol;Acc:5172] | |
| HRAS | V-Ha-ras Harvey rat sarcoma viral oncogene homolog | √ |
| HRH4 | Histamine receptor H4 [Source:HGNC Symbol;Acc:17383] | |
| HS2ST1 | Heparan sulfate 2-O-sulfotransferase 1 [Source:HGNC Symbol;Acc:5193] | |

| | | |
|-----------------|---|--|
| HS3ST1 | Heparan sulfate (glucosamine) 3-O-sulfotransferase 1 [Source:HGNC Symbol;Acc:5194] | |
| HS3ST3B1 | Heparan sulfate (glucosamine) 3-O-sulfotransferase 3B1 [Source:HGNC Symbol;Acc:5198] | |
| HSD11B1L | Hydroxysteroid (11-beta) dehydrogenase 1-like [Source:HGNC Symbol;Acc:30419] | |
| HSD17B2 | Hydroxysteroid (17-beta) dehydrogenase 2 [Source:HGNC Symbol;Acc:5211] | |
| HSD17B6 | Hydroxysteroid (17-beta) dehydrogenase 6 homolog (mouse) [Source:HGNC Symbol;Acc:23316] | |
| HSD17B7 | Hydroxysteroid (17-beta) dehydrogenase 7 [Source:HGNC Symbol;Acc:5215] | |
| HSDL2 | Hydroxysteroid dehydrogenase like 2 [Source:HGNC Symbol;Acc:18572] | |
| HSP90AB1 | Heat shock protein 90kda alpha (cytosolic), class B member 1 [Source:HGNC Symbol;Acc:5258] | |
| HSPA12A | Heat shock 70kda protein 12A [Source:HGNC Symbol;Acc:19022] | |
| HSPA12B | Heat shock 70kd protein 12B [Source:HGNC Symbol;Acc:16193] | |
| HSPA13 | Heat shock protein 70kda family, member 13 [Source:HGNC Symbol;Acc:11375] | |
| HSPA14 | Heat shock 70kda protein 14 [Source:HGNC Symbol;Acc:29526] | |
| HSPA1L | Heat shock 70kda protein 1-like [Source:HGNC Symbol;Acc:5234] | |
| HSPA4 | Heat shock 70kda protein 4 [Source:HGNC Symbol;Acc:5237] | |
| HSPA4L | Heat shock 70kda protein 4-like [Source:HGNC Symbol;Acc:17041] | |
| HSPA8 | Heat shock 70kda protein 8 [Source:HGNC Symbol;Acc:5241] | |
| HSPB1 | Heat shock 27kda protein 1 [Source:HGNC Symbol;Acc:5246] | |
| HSPB11 | Heat shock protein family B (small), member 11 [Source:HGNC Symbol;Acc:25019] | |
| HSPB3 | Heat shock 27kda protein 3 [Source:HGNC Symbol;Acc:5248] | |
| HSPB9 | Heat shock protein, alpha-crystallin-related, B9 [Source:HGNC Symbol;Acc:30589] | |
| HSPBP1 | HSPA (heat shock 70kda) binding protein, cytoplasmic cochaperone 1 [Source:HGNC Symbol;Acc:24989] | |

| | | |
|--------------|--|--|
| HSPD1 | Heat shock 60kda protein 1 (chaperonin) [Source:HGNC Symbol;Acc:5261] | |
| HSPG2 | Heparan sulfate proteoglycan 2 [Source:HGNC Symbol;Acc:5273] | |
| HSPH1 | Heat shock 105kda/110kda protein 1 [Source:HGNC Symbol;Acc:16969] | |
| HTR1D | 5-hydroxytryptamine (serotonin) receptor 1D [Source:HGNC Symbol;Acc:5289] | |
| HTR1F | 5-hydroxytryptamine (serotonin) receptor 1F [Source:HGNC Symbol;Acc:5292] | |
| HTR2A | 5-hydroxytryptamine (serotonin) receptor 2A [Source:HGNC Symbol;Acc:5293] | |
| HTR2C | 5-hydroxytryptamine (serotonin) receptor 2C [Source:HGNC Symbol;Acc:5295] | |
| HTR3A | 5-hydroxytryptamine (serotonin) receptor 3A [Source:HGNC Symbol;Acc:5297] | |
| HTR7 | 5-hydroxytryptamine (serotonin) receptor 7 (adenylate cyclase-coupled) [Source:HGNC Symbol;Acc:5302] | |
| HTT | Huntingtin [Source:HGNC Symbol;Acc:4851] | |
| HUNK | Hormonally up-regulated Neu-associated kinase [Source:HGNC Symbol;Acc:13326] | |
| HUWE1 | HECT, UBA and WWE domain containing 1 [Source:HGNC Symbol;Acc:30892] | |
| HVCN1 | Hydrogen voltage-gated channel 1 [Source:HGNC Symbol;Acc:28240] | |
| HYAL2 | Hyaluronoglucosaminidase 2 [Source:HGNC Symbol;Acc:5321] | |
| HYDIN | Hydrocephalus inducing homolog (mouse) [Source:HGNC Symbol;Acc:19368] | |
| HYI | Hydroxypyruvate isomerase (putative) [Source:HGNC Symbol;Acc:26948] | |
| HYOU1 | Hypoxia up-regulated 1 [Source:HGNC Symbol;Acc:16931] | |
| IAH1 | Isoamyl acetate-hydrolyzing esterase 1 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:27696] | |
| IAPP | Islet amyloid polypeptide [Source:HGNC Symbol;Acc:5329] | |
| IARS | Isoleucyl-trna synthetase [Source:HGNC Symbol;Acc:5330] | |
| IARS2 | Isoleucyl-trna synthetase 2, mitochondrial [Source:HGNC Symbol;Acc:29685] | |

| | | |
|---------------|--|---|
| ICA1 | Islet cell autoantigen 1, 69kda [Source:HGNC Symbol;Acc:5343] | |
| ICAM2 | Intercellular adhesion molecule 2 [Source:HGNC Symbol;Acc:5345] | |
| ICAM3 | Intercellular adhesion molecule 3 [Source:HGNC Symbol;Acc:5346] | |
| ICAM4 | Intercellular adhesion molecule 4 (Landsteiner-Wiener blood group) [Source:HGNC Symbol;Acc:5347] | |
| ICK | Intestinal cell (MAK-like) kinase [Source:HGNC Symbol;Acc:21219] | |
| ICOSLG | Inducible T-cell co-stimulator ligand [Source:HGNC Symbol;Acc:17087] | |
| ID4 | Inhibitor of DNA binding 4, dominant negative helix-loop-helix protein [Source:HGNC Symbol;Acc:5363] | |
| IDE | Insulin-degrading enzyme [Source:HGNC Symbol;Acc:5381] | |
| IDH1 | Isocitrate dehydrogenase 1 (NADP ⁺), soluble | √ |
| IDH2 | Isocitrate dehydrogenase 2 (NADP ⁺), mitochondrial | √ |
| IDH3B | Isocitrate dehydrogenase 3 (NAD ⁺) beta [Source:HGNC Symbol;Acc:5385] | |
| IDI1 | Isopentenyl-diphosphate delta isomerase 1 [Source:HGNC Symbol;Acc:5387] | |
| IDS | Iduronate 2-sulfatase [Source:HGNC Symbol;Acc:5389] | |
| IDUA | Iduronidase, alpha-L- [Source:HGNC Symbol;Acc:5391] | |
| IFFO1 | Intermediate filament family orphan 1 [Source:HGNC Symbol;Acc:24970] | |
| IFI30 | Interferon, gamma-inducible protein 30 [Source:HGNC Symbol;Acc:5398] | |
| IFI44 | Interferon-induced protein 44 [Source:HGNC Symbol;Acc:16938] | |
| IFNA1 | Interferon, alpha 1 [Source:HGNC Symbol;Acc:5417] | |
| IFNA2 | Interferon, alpha 2 [Source:HGNC Symbol;Acc:5423] | |
| IFNA21 | Interferon, alpha 21 [Source:HGNC Symbol;Acc:5424] | |
| IFNA5 | Interferon, alpha 5 [Source:HGNC Symbol;Acc:5426] | |
| IFNA6 | Interferon, alpha 6 [Source:HGNC Symbol;Acc:5427] | |
| IFNA8 | Interferon, alpha 8 [Source:HGNC Symbol;Acc:5429] | |
| IFNAR1 | Interferon (alpha, beta and omega) receptor 1 [Source:HGNC Symbol;Acc:5432] | |
| IFNAR2 | Interferon (alpha, beta and omega) receptor 2 [Source:HGNC Symbol;Acc:5433] | |
| IFNB1 | Interferon, beta 1, fibroblast [Source:HGNC Symbol;Acc:5434] | |
| IFNGR1 | Interferon gamma receptor 1 [Source:HGNC Symbol;Acc:5439] | |

| | | |
|----------------|---|--|
| IFT140 | Intraflagellar transport 140 homolog (Chlamydomonas) [Source:HGNC Symbol;Acc:29077] | |
| IFT172 | Intraflagellar transport 172 homolog (Chlamydomonas) [Source:HGNC Symbol;Acc:30391] | |
| IFT20 | Intraflagellar transport 20 homolog (Chlamydomonas) [Source:HGNC Symbol;Acc:30989] | |
| IFT46 | Intraflagellar transport 46 homolog (Chlamydomonas) [Source:HGNC Symbol;Acc:26146] | |
| IFT57 | Intraflagellar transport 57 homolog (Chlamydomonas) [Source:HGNC Symbol;Acc:17367] | |
| IFT80 | Intraflagellar transport 80 homolog (Chlamydomonas) [Source:HGNC Symbol;Acc:29262] | |
| IFT81 | Intraflagellar transport 81 homolog (Chlamydomonas) [Source:HGNC Symbol;Acc:14313] | |
| IGDCC4 | Immunoglobulin superfamily, DCC subclass, member 4 [Source:HGNC Symbol;Acc:13770] | |
| IGF1R | Insulin-like growth factor 1 receptor [Source:HGNC Symbol;Acc:5465] | |
| IGF2 | Insulin-like growth factor 2 (somatomedin A) [Source:HGNC Symbol;Acc:5466] | |
| IGF2BP1 | Insulin-like growth factor 2 mrna binding protein 1 [Source:HGNC Symbol;Acc:28866] | |
| IGF2BP2 | Insulin-like growth factor 2 mrna binding protein 2 [Source:HGNC Symbol;Acc:28867] | |
| IGF2BP3 | Insulin-like growth factor 2 mrna binding protein 3 [Source:HGNC Symbol;Acc:28868] | |
| IGF2R | Insulin-like growth factor 2 receptor [Source:HGNC Symbol;Acc:5467] | |
| IGFBP4 | Insulin-like growth factor binding protein 4 [Source:HGNC Symbol;Acc:5473] | |
| IGKC | Immunoglobulin kappa constant [Source:HGNC Symbol;Acc:5716] | |
| IGKV4-1 | Immunoglobulin kappa variable 4-1 [Source:HGNC Symbol;Acc:5834] | |
| IGLC1 | Immunoglobulin lambda constant 1 (Mcg marker) [Source:HGNC Symbol;Acc:5855] | |

| | | |
|-----------------|---|--|
| IGLC2 | Immunoglobulin lambda constant 2 (Kern-Oz- marker) [Source:HGNC Symbol;Acc:5856] | |
| IGLC3 | Immunoglobulin lambda constant 3 (Kern-Oz+ marker) [Source:HGNC Symbol;Acc:5857] | |
| IGLV5-37 | Immunoglobulin lambda variable 5-37 [Source:HGNC Symbol;Acc:5922] | |
| IGLV5-45 | Immunoglobulin lambda variable 5-45 [Source:HGNC Symbol;Acc:5924] | |
| IGLV5-52 | Immunoglobulin lambda variable 5-52 [Source:HGNC Symbol;Acc:5926] | |
| IGSF1 | Immunoglobulin superfamily, member 1 [Source:HGNC Symbol;Acc:5948] | |
| IGSF11 | Immunoglobulin superfamily, member 11 [Source:HGNC Symbol;Acc:16669] | |
| IGSF22 | Immunoglobulin superfamily, member 22 [Source:HGNC Symbol;Acc:26750] | |
| IGSF3 | Immunoglobulin superfamily, member 3 [Source:HGNC Symbol;Acc:5950] | |
| IKBKAP | Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase complex-associated protein [Source:HGNC Symbol;Acc:5959] | |
| IKBKE | Inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase epsilon [Source:HGNC Symbol;Acc:14552] | |
| IKZF5 | IKAROS family zinc finger 5 (Pegasus) [Source:HGNC Symbol;Acc:14283] | |
| IL10 | Interleukin 10 [Source:HGNC Symbol;Acc:5962] | |
| IL12A | Interleukin 12A (natural killer cell stimulatory factor 1, cytotoxic lymphocyte maturation factor 1, p35) [Source:HGNC Symbol;Acc:5969] | |
| IL12RB2 | Interleukin 12 receptor, beta 2 [Source:HGNC Symbol;Acc:5972] | |
| IL13RA1 | Interleukin 13 receptor, alpha 1 [Source:HGNC Symbol;Acc:5974] | |
| IL15 | Interleukin 15 [Source:HGNC Symbol;Acc:5977] | |
| IL17B | Interleukin 17B [Source:HGNC Symbol;Acc:5982] | |
| IL17RA | Interleukin 17 receptor A [Source:HGNC Symbol;Acc:5985] | |
| IL17REL | Interleukin 17 receptor E-like [Source:HGNC Symbol;Acc:33808] | |
| IL18 | Interleukin 18 (interferon-gamma-inducing factor) [Source:HGNC Symbol;Acc:5986] | |
| IL18R1 | Interleukin 18 receptor 1 [Source:HGNC Symbol;Acc:5988] | |
| IL19 | Interleukin 19 [Source:HGNC Symbol;Acc:5990] | |
| IL1B | Interleukin 1, beta [Source:HGNC Symbol;Acc:5992] | |
| IL1R1 | Interleukin 1 receptor, type I [Source:HGNC Symbol;Acc:5993] | |

| | | |
|-----------------|---|---|
| IL1R2 | Interleukin 1 receptor, type II [Source:HGNC Symbol;Acc:5994] | |
| IL1RAPL2 | Interleukin 1 receptor accessory protein-like 2 [Source:HGNC Symbol;Acc:5997] | |
| IL20RB | Interleukin 20 receptor beta [Source:HGNC Symbol;Acc:6004] | |
| IL28B | Interleukin 28B (interferon, lambda 3) [Source:HGNC Symbol;Acc:18365] | |
| IL2RA | Interleukin 2 receptor, alpha [Source:HGNC Symbol;Acc:6008] | |
| IL2RB | Interleukin 2 receptor, beta [Source:HGNC Symbol;Acc:6009] | |
| IL2RG | Interleukin 2 receptor, gamma [Source:HGNC Symbol;Acc:6010] | |
| IL31RA | Interleukin 31 receptor A [Source:HGNC Symbol;Acc:18969] | |
| IL33 | Interleukin 33 [Source:HGNC Symbol;Acc:16028] | |
| IL4R | Interleukin 4 receptor [Source:HGNC Symbol;Acc:6015] | |
| IL6R | Interleukin 6 receptor [Source:HGNC Symbol;Acc:6019] | |
| IL6ST | Interleukin 6 signal transducer (gp130, oncostatin M receptor) | √ |
| IL7R | Interleukin 7 receptor | √ |
| IL9R | Interleukin 9 receptor [Source:HGNC Symbol;Acc:6030] | |
| ILDR1 | Immunoglobulin-like domain containing receptor 1 [Source:HGNC Symbol;Acc:28741] | |
| ILDR2 | Immunoglobulin-like domain containing receptor 2 [Source:HGNC Symbol;Acc:18131] | |
| ILVBL | Ilvb (bacterial acetolactate synthase)-like [Source:HGNC Symbol;Acc:6041] | |
| IMMT | Inner membrane protein, mitochondrial [Source:HGNC Symbol;Acc:6047] | |
| IMPA1 | Inositol(myo)-1(or 4)-monophosphatase 1 [Source:HGNC Symbol;Acc:6050] | |
| IMPDH2 | IMP (inosine 5'-monophosphate) dehydrogenase 2 [Source:HGNC Symbol;Acc:6053] | |
| INADL | Inad-like (Drosophila) [Source:HGNC Symbol;Acc:28881] | |
| INCENP | Inner centromere protein antigens 135/155kda [Source:HGNC Symbol;Acc:6058] | |
| INHBA | Inhibin, beta A [Source:HGNC Symbol;Acc:6066] | |
| INHBB | Inhibin, beta B [Source:HGNC Symbol;Acc:6067] | |
| INMT | Indolethylamine N-methyltransferase [Source:HGNC Symbol;Acc:6069] | |
| INO80 | INO80 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:26956] | |
| INO80D | INO80 complex subunit D [Source:HGNC Symbol;Acc:25997] | |

| | | |
|---------------|--|--|
| INO80E | INO80 complex subunit E [Source:HGNC Symbol;Acc:26905] | |
| INPP4B | Inositol polyphosphate-4-phosphatase, type II, 105kda [Source:HGNC Symbol;Acc:6075] | |
| INPP5A | Inositol polyphosphate-5-phosphatase, 40kda [Source:HGNC Symbol;Acc:6076] | |
| INPP5B | Inositol polyphosphate-5-phosphatase, 75kda [Source:HGNC Symbol;Acc:6077] | |
| INPP5D | Inositol polyphosphate-5-phosphatase, 145kda [Source:HGNC Symbol;Acc:6079] | |
| INPP5F | Inositol polyphosphate-5-phosphatase F [Source:HGNC Symbol;Acc:17054] | |
| INPPL1 | Inositol polyphosphate phosphatase-like 1 [Source:HGNC Symbol;Acc:6080] | |
| INSIG1 | Insulin induced gene 1 [Source:HGNC Symbol;Acc:6083] | |
| INSR | Insulin receptor [Source:HGNC Symbol;Acc:6091] | |
| INSRR | Insulin receptor-related receptor [Source:HGNC Symbol;Acc:6093] | |
| INTS1 | Integrator complex subunit 1 [Source:HGNC Symbol;Acc:24555] | |
| INTS10 | Integrator complex subunit 10 [Source:HGNC Symbol;Acc:25548] | |
| INTS2 | Integrator complex subunit 2 [Source:HGNC Symbol;Acc:29241] | |
| INTS5 | Integrator complex subunit 5 [Source:HGNC Symbol;Acc:29352] | |
| INTS8 | Integrator complex subunit 8 [Source:HGNC Symbol;Acc:26048] | |
| INTU | Inturned planar cell polarity effector homolog (Drosophila) [Source:HGNC Symbol;Acc:29239] | |
| IPCEF1 | Interaction protein for cytohesin exchange factors 1 [Source:HGNC Symbol;Acc:21204] | |
| IPO13 | Importin 13 [Source:HGNC Symbol;Acc:16853] | |
| IPO5 | Importin 5 [Source:HGNC Symbol;Acc:6402] | |
| IPO9 | Importin 9 [Source:HGNC Symbol;Acc:19425] | |
| IQCA1 | IQ motif containing with AAA domain 1 [Source:HGNC Symbol;Acc:26195] | |
| IQCG | IQ motif containing G [Source:HGNC Symbol;Acc:25251] | |
| IQCH | IQ motif containing H [Source:HGNC Symbol;Acc:25721] | |

| | | |
|----------------|--|--|
| IQGAP1 | IQ motif containing gtpase activating protein 1 [Source:HGNC Symbol;Acc:6110] | |
| IQGAP2 | IQ motif containing gtpase activating protein 2 [Source:HGNC Symbol;Acc:6111] | |
| IQGAP3 | IQ motif containing gtpase activating protein 3 [Source:HGNC Symbol;Acc:20669] | |
| IQSEC1 | IQ motif and Sec7 domain 1 [Source:HGNC Symbol;Acc:29112] | |
| IRAK3 | Interleukin-1 receptor-associated kinase 3 [Source:HGNC Symbol;Acc:17020] | |
| IREB2 | Iron-responsive element binding protein 2 [Source:HGNC Symbol;Acc:6115] | |
| IRF1 | Interferon regulatory factor 1 [Source:HGNC Symbol;Acc:6116] | |
| IRF2BPL | Interferon regulatory factor 2 binding protein-like [Source:HGNC Symbol;Acc:14282] | |
| IRF5 | Interferon regulatory factor 5 [Source:HGNC Symbol;Acc:6120] | |
| IRGQ | Immunity-related gtpase family, Q [Source:HGNC Symbol;Acc:24868] | |
| IRS1 | Insulin receptor substrate 1 [Source:HGNC Symbol;Acc:6125] | |
| IRS2 | Insulin receptor substrate 2 [Source:HGNC Symbol;Acc:6126] | |
| IRX6 | Iroquois homeobox 6 [Source:HGNC Symbol;Acc:14675] | |
| ISCU | Iron-sulfur cluster scaffold homolog (E. Coli) [Source:HGNC Symbol;Acc:29882] | |
| ISG20 | Interferon stimulated exonuclease gene 20kda [Source:HGNC Symbol;Acc:6130] | |
| ISLR2 | Immunoglobulin superfamily containing leucine-rich repeat 2 [Source:HGNC Symbol;Acc:29286] | |
| ISM2 | Isthmin 2 homolog (zebrafish) [Source:HGNC Symbol;Acc:23176] | |
| ISOC1 | Isochorismatase domain containing 1 [Source:HGNC Symbol;Acc:24254] | |
| ISPD | Isoprenoid synthase domain containing [Source:HGNC Symbol;Acc:37276] | |
| ISX | Intestine-specific homeobox [Source:HGNC Symbol;Acc:28084] | |
| ISY1 | ISY1 splicing factor homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:29201] | |
| ISYNA1 | Inositol-3-phosphate synthase 1 [Source:HGNC Symbol;Acc:29821] | |

| | | |
|-----------------|--|---|
| ITCH | Itchy E3 ubiquitin protein ligase homolog (mouse) [Source:HGNC Symbol;Acc:13890] | |
| ITFG3 | Integrin alpha FG-GAP repeat containing 3 [Source:HGNC Symbol;Acc:14163] | |
| ITGA10 | Integrin, alpha 10 [Source:HGNC Symbol;Acc:6135] | |
| ITGA11 | Integrin, alpha 11 [Source:HGNC Symbol;Acc:6136] | |
| ITGA2 | Integrin, alpha 2 (CD49B, alpha 2 subunit of VLA-2 receptor) [Source:HGNC Symbol;Acc:6137] | |
| ITGA4 | Integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor) [Source:HGNC Symbol;Acc:6140] | |
| ITGA5 | Integrin, alpha 5 (fibronectin receptor, alpha polypeptide) [Source:HGNC Symbol;Acc:6141] | |
| ITGAE | Integrin, alpha E (antigen CD103, human mucosal lymphocyte antigen 1; alpha polypeptide) [Source:HGNC Symbol;Acc:6147] | |
| ITGB1BP1 | Integrin beta 1 binding protein 1 [Source:HGNC Symbol;Acc:23927] | |
| ITGB1BP2 | Integrin beta 1 binding protein (melusin) 2 [Source:HGNC Symbol;Acc:6154] | |
| ITGB2 | Integrin, beta 2 (complement component 3 receptor 3 and 4 subunit) [Source:HGNC Symbol;Acc:6155] | |
| ITGB4 | Integrin, beta 4 [Source:HGNC Symbol;Acc:6158] | |
| ITGB5 | Integrin, beta 5 [Source:HGNC Symbol;Acc:6160] | |
| ITGB7 | Integrin, beta 7 [Source:HGNC Symbol;Acc:6162] | |
| ITIH2 | Inter-alpha (globulin) inhibitor H2 [Source:HGNC Symbol;Acc:6167] | |
| ITIH3 | Inter-alpha (globulin) inhibitor H3 [Source:HGNC Symbol;Acc:6168] | |
| ITIH5L | Inter-alpha (globulin) inhibitor H5-like [Source:HGNC Symbol;Acc:28907] | |
| ITK | IL2-inducible T-cell kinase | √ |
| ITLN1 | Intelectin 1 (galactofuranose binding) [Source:HGNC Symbol;Acc:18259] | |
| ITM2A | Integral membrane protein 2A [Source:HGNC Symbol;Acc:6173] | |
| ITPKB | Inositol 1,4,5-trisphosphate 3-kinase B [Source:HGNC Symbol;Acc:6179] | |
| ITPR1 | Inositol 1,4,5-triphosphate receptor, type 1 [Source:HGNC Symbol;Acc:6180] | |
| ITPR2 | Inositol 1,4,5-triphosphate receptor, type 2 [Source:HGNC Symbol;Acc:6181] | |

| | | |
|----------------------|--|---|
| ITPR3 | Inositol 1,4,5-triphosphate receptor, type 3 [Source:HGNC Symbol;Acc:6182] | |
| ITPRIPL1 | Inositol 1,4,5-triphosphate receptor interacting protein-like 1 [Source:HGNC Symbol;Acc:29371] | |
| ITPRIPL2 | Inositol 1,4,5-triphosphate receptor interacting protein-like 2 [Source:HGNC Symbol;Acc:27257] | |
| ITSN1 | Intersectin 1 (SH3 domain protein) [Source:HGNC Symbol;Acc:6183] | |
| ITSN2 | Intersectin 2 [Source:HGNC Symbol;Acc:6184] | |
| IVNS1ABP | Influenza virus NS1A binding protein [Source:HGNC Symbol;Acc:16951] | |
| IYD | Iodotyrosine deiodinase [Source:HGNC Symbol;Acc:21071] | |
| IZUMO1 | Izumo sperm-egg fusion 1 [Source:HGNC Symbol;Acc:28539] | |
| JAG1 | Jagged 1 [Source:HGNC Symbol;Acc:6188] | |
| JAG2 | Jagged 2 [Source:HGNC Symbol;Acc:6189] | |
| JAK3 | Janus kinase 3 | √ |
| JAKMIP3 | Janus kinase and microtubule interacting protein 3 [Source:HGNC Symbol;Acc:23523] | |
| JAZF1 | JAZF zinc finger 1 | √ |
| JDP2 | Jun dimerization protein 2 [Source:HGNC Symbol;Acc:17546] | |
| JMJD4 | Jumonji domain containing 4 [Source:HGNC Symbol;Acc:25724] | |
| JMJD5 | Jumonji domain containing 5 [Source:HGNC Symbol;Acc:25840] | |
| JMJD6 | Jumonji domain containing 6 [Source:HGNC Symbol;Acc:19355] | |
| JMJD7 | Jumonji domain containing 7 [Source:HGNC Symbol;Acc:34397] | |
| JMJD7-PLA2G4B | JMJD7-PLA2G4B readthrough [Source:HGNC Symbol;Acc:34449] | |
| JOSD1 | Josephin domain containing 1 [Source:HGNC Symbol;Acc:28953] | |
| JTB | Jumping translocation breakpoint [Source:HGNC Symbol;Acc:6201] | |
| JUN | Jun proto-oncogene | √ |
| JUND | Jun D proto-oncogene [Source:HGNC Symbol;Acc:6206] | |
| KAAG1 | Kidney associated antigen 1 [Source:HGNC Symbol;Acc:21031] | |
| KALRN | Kalirin, rhogef kinase [Source:HGNC Symbol;Acc:4814] | |
| KANK1 | KN motif and ankyrin repeat domains 1 [Source:HGNC Symbol;Acc:19309] | |
| KAT2A | K(lysine) acetyltransferase 2A [Source:HGNC Symbol;Acc:4201] | |

| | | |
|----------------|---|--|
| KATNA1 | Katanin p60 (atpase containing) subunit A 1 [Source:HGNC Symbol;Acc:6216] | |
| KATNAL2 | Katanin p60 subunit A-like 2 [Source:HGNC Symbol;Acc:25387] | |
| KAZALD1 | Kazal-type serine peptidase inhibitor domain 1 [Source:HGNC Symbol;Acc:25460] | |
| KAZN | Kazrin, periplakin interacting protein [Source:HGNC Symbol;Acc:29173] | |
| KBTBD10 | Kelch repeat and BTB (POZ) domain containing 10 [Source:HGNC Symbol;Acc:16905] | |
| KBTBD11 | Kelch repeat and BTB (POZ) domain containing 11 [Source:HGNC Symbol;Acc:29104] | |
| KBTBD12 | Kelch repeat and BTB (POZ) domain containing 12 [Source:HGNC Symbol;Acc:25731] | |
| KBTBD8 | Kelch repeat and BTB (POZ) domain containing 8 [Source:HGNC Symbol;Acc:30691] | |
| KCNA1 | Potassium voltage-gated channel, shaker-related subfamily, member 1 (episodic ataxia with myokymia) [Source:HGNC Symbol;Acc:6218] | |
| KCNA4 | Potassium voltage-gated channel, shaker-related subfamily, member 4 [Source:HGNC Symbol;Acc:6222] | |
| KCNA7 | Potassium voltage-gated channel, shaker-related subfamily, member 7 [Source:HGNC Symbol;Acc:6226] | |
| KCNB1 | Potassium voltage-gated channel, Shab-related subfamily, member 1 [Source:HGNC Symbol;Acc:6231] | |
| KCNC4 | Potassium voltage-gated channel, Shaw-related subfamily, member 4 [Source:HGNC Symbol;Acc:6236] | |
| KCND1 | Potassium voltage-gated channel, Shal-related subfamily, member 1 [Source:HGNC Symbol;Acc:6237] | |
| KCND2 | Potassium voltage-gated channel, Shal-related subfamily, member 2 [Source:HGNC Symbol;Acc:6238] | |
| KCND3 | Potassium voltage-gated channel, Shal-related subfamily, member 3 [Source:HGNC Symbol;Acc:6239] | |
| KCNE2 | Potassium voltage-gated channel, Isk-related family, member 2 [Source:HGNC Symbol;Acc:6242] | |

| | | |
|---------------|---|---|
| KCNG1 | Potassium voltage-gated channel, subfamily G, member 1 [Source:HGNC Symbol;Acc:6248] | |
| KCNG3 | Potassium voltage-gated channel, subfamily G, member 3 [Source:HGNC Symbol;Acc:18306] | |
| KCNG4 | Potassium voltage-gated channel, subfamily G, member 4 [Source:HGNC Symbol;Acc:19697] | |
| KCNH1 | Potassium voltage-gated channel, subfamily H (eag-related), member 1 [Source:HGNC Symbol;Acc:6250] | |
| KCNH3 | Potassium voltage-gated channel, subfamily H (eag-related), member 3 [Source:HGNC Symbol;Acc:6252] | |
| KCNH6 | Potassium voltage-gated channel, subfamily H (eag-related), member 6 [Source:HGNC Symbol;Acc:18862] | |
| KCNIP3 | Kv channel interacting protein 3, calsenilin [Source:HGNC Symbol;Acc:15523] | |
| KCNJ1 | Potassium inwardly-rectifying channel, subfamily J, member 1 [Source:HGNC Symbol;Acc:6255] | |
| KCNJ12 | Potassium inwardly-rectifying channel, subfamily J, member 12 [Source:HGNC Symbol;Acc:6258] | |
| KCNJ15 | Potassium inwardly-rectifying channel, subfamily J, member 15 [Source:HGNC Symbol;Acc:6261] | |
| KCNJ16 | Potassium inwardly-rectifying channel, subfamily J, member 16 [Source:HGNC Symbol;Acc:6262] | |
| KCNJ2 | Potassium inwardly-rectifying channel, subfamily J, member 2 [Source:HGNC Symbol;Acc:6263] | |
| KCNJ5 | Potassium inwardly-rectifying channel, subfamily J, member 5 | √ |
| KCNJ9 | Potassium inwardly-rectifying channel, subfamily J, member 9 [Source:HGNC Symbol;Acc:6270] | |
| KCNK10 | Potassium channel, subfamily K, member 10 [Source:HGNC Symbol;Acc:6273] | |
| KCNK17 | Potassium channel, subfamily K, member 17 [Source:HGNC Symbol;Acc:14465] | |
| KCNK2 | Potassium channel, subfamily K, member 2 [Source:HGNC Symbol;Acc:6277] | |

| | | |
|---------------|---|--|
| KCNK3 | Potassium channel, subfamily K, member 3 [Source:HGNC Symbol;Acc:6278] | |
| KCNK4 | Potassium channel, subfamily K, member 4 [Source:HGNC Symbol;Acc:6279] | |
| KCNK5 | Potassium channel, subfamily K, member 5 [Source:HGNC Symbol;Acc:6280] | |
| KCNK6 | Potassium channel, subfamily K, member 6 [Source:HGNC Symbol;Acc:6281] | |
| KCNMA1 | Potassium large conductance calcium-activated channel, subfamily M, alpha member 1 [Source:HGNC Symbol;Acc:6284] | |
| KCNMB4 | Potassium large conductance calcium-activated channel, subfamily M, beta member 4 [Source:HGNC Symbol;Acc:6289] | |
| KCNN1 | Potassium intermediate/small conductance calcium-activated channel, subfamily N, member 1 [Source:HGNC Symbol;Acc:6290] | |
| KCNQ1 | Potassium voltage-gated channel, KQT-like subfamily, member 1 [Source:HGNC Symbol;Acc:6294] | |
| KCNQ3 | Potassium voltage-gated channel, KQT-like subfamily, member 3 [Source:HGNC Symbol;Acc:6297] | |
| KCNQ4 | Potassium voltage-gated channel, KQT-like subfamily, member 4 [Source:HGNC Symbol;Acc:6298] | |
| KCNS1 | Potassium voltage-gated channel, delayed-rectifier, subfamily S, member 1 [Source:HGNC Symbol;Acc:6300] | |
| KCTD10 | Potassium channel tetramerisation domain containing 10 [Source:HGNC Symbol;Acc:23236] | |
| KCTD12 | Potassium channel tetramerisation domain containing 12 [Source:HGNC Symbol;Acc:14678] | |
| KCTD14 | Potassium channel tetramerisation domain containing 14 [Source:HGNC Symbol;Acc:23295] | |
| KCTD15 | Potassium channel tetramerisation domain containing 15 [Source:HGNC Symbol;Acc:23297] | |
| KCTD16 | Potassium channel tetramerisation domain containing 16 [Source:HGNC Symbol;Acc:29244] | |

| | | |
|-----------------|--|---|
| KCTD18 | Potassium channel tetramerisation domain containing 18 [Source:HGNC Symbol;Acc:26446] | |
| KCTD2 | Potassium channel tetramerisation domain containing 2 [Source:HGNC Symbol;Acc:21294] | |
| KCTD3 | Potassium channel tetramerisation domain containing 3 [Source:HGNC Symbol;Acc:21305] | |
| KCTD6 | Potassium channel tetramerisation domain containing 6 [Source:HGNC Symbol;Acc:22235] | |
| KCTD7 | Potassium channel tetramerisation domain containing 7 [Source:HGNC Symbol;Acc:21957] | |
| KDM1A | Lysine (K)-specific demethylase 1A [Source:HGNC Symbol;Acc:29079] | |
| KDM2B | Lysine (K)-specific demethylase 2B [Source:HGNC Symbol;Acc:13610] | |
| KDM3A | Lysine (K)-specific demethylase 3A [Source:HGNC Symbol;Acc:20815] | |
| KDM4A | Lysine (K)-specific demethylase 4A [Source:HGNC Symbol;Acc:22978] | |
| KDM4C | Lysine (K)-specific demethylase 4C [Source:HGNC Symbol;Acc:17071] | |
| KDM5A | Lysine (K)-specific demethylase 5A | √ |
| KDM5B | Lysine (K)-specific demethylase 5B [Source:HGNC Symbol;Acc:18039] | |
| KDSR | 3-ketodihydrosphingosine reductase [Source:HGNC Symbol;Acc:4021] | |
| KEAP1 | Kelch-like ECH-associated protein 1 [Source:HGNC Symbol;Acc:23177] | |
| KEL | Kell blood group, metallo-endopeptidase [Source:HGNC Symbol;Acc:6308] | |
| KHDC1 | KH homology domain containing 1 [Source:HGNC Symbol;Acc:21366] | |
| KHDRBS1 | KH domain containing, RNA binding, signal transduction associated 1 [Source:HGNC Symbol;Acc:18116] | |
| KHNYN | KH and NYN domain containing [Source:HGNC Symbol;Acc:20166] | |
| KIAA0087 | KIAA0087 [Source:HGNC Symbol;Acc:22191] | |
| KIAA0090 | KIAA0090 [Source:HGNC Symbol;Acc:28957] | |
| KIAA0141 | KIAA0141 [Source:HGNC Symbol;Acc:28969] | |
| KIAA0182 | KIAA0182 [Source:HGNC Symbol;Acc:28979] | |
| KIAA0195 | KIAA0195 [Source:HGNC Symbol;Acc:28983] | |
| KIAA0196 | KIAA0196 [Source:HGNC Symbol;Acc:28984] | |
| KIAA0226 | KIAA0226 [Source:HGNC Symbol;Acc:28991] | |
| KIAA0232 | KIAA0232 [Source:HGNC Symbol;Acc:28992] | |

| | | |
|------------------|--|--|
| KIAA0240 | KIAA0240 [Source:HGNC Symbol;Acc:21111] | |
| KIAA0284 | KIAA0284 [Source:HGNC Symbol;Acc:20362] | |
| KIAA0319L | KIAA0319-like [Source:HGNC Symbol;Acc:30071] | |
| KIAA0355 | KIAA0355 [Source:HGNC Symbol;Acc:29016] | |
| KIAA0391 | KIAA0391 [Source:HGNC Symbol;Acc:19958] | |
| KIAA0430 | KIAA0430 [Source:HGNC Symbol;Acc:29562] | |
| KIAA0467 | KIAA0467 [Source:HGNC Symbol;Acc:29040] | |
| KIAA0564 | KIAA0564 [Source:HGNC Symbol;Acc:29071] | |
| KIAA0586 | KIAA0586 [Source:HGNC Symbol;Acc:19960] | |
| KIAA0649 | KIAA0649 [Source:HGNC Symbol;Acc:29089] | |
| KIAA0664 | KIAA0664 [Source:HGNC Symbol;Acc:29094] | |
| KIAA0753 | KIAA0753 [Source:HGNC Symbol;Acc:29110] | |
| KIAA0889 | KIAA0889 [Source:HGNC Symbol;Acc:16111] | |
| KIAA0895 | KIAA0895 [Source:HGNC Symbol;Acc:22206] | |
| KIAA0930 | KIAA0930 [Source:HGNC Symbol;Acc:1314] | |
| KIAA0947 | KIAA0947 [Source:HGNC Symbol;Acc:29154] | |
| KIAA1009 | KIAA1009 [Source:HGNC Symbol;Acc:21107] | |
| KIAA1024 | KIAA1024 [Source:HGNC Symbol;Acc:29172] | |
| KIAA1033 | KIAA1033 [Source:HGNC Symbol;Acc:29174] | |
| KIAA1045 | KIAA1045 [Source:HGNC Symbol;Acc:29180] | |
| KIAA1109 | KIAA1109 [Source:HGNC Symbol;Acc:26953] | |
| KIAA1199 | KIAA1199 [Source:HGNC Symbol;Acc:29213] | |
| KIAA1217 | KIAA1217 [Source:HGNC Symbol;Acc:25428] | |
| KIAA1244 | KIAA1244 [Source:HGNC Symbol;Acc:21213] | |
| KIAA1257 | KIAA1257 [Source:HGNC Symbol;Acc:29231] | |
| KIAA1267 | KIAA1267 [Source:HGNC Symbol;Acc:24565] | |
| KIAA1274 | KIAA1274 [Source:HGNC Symbol;Acc:23530] | |
| KIAA1310 | KIAA1310 [Source:HGNC Symbol;Acc:25473] | |
| KIAA1324 | KIAA1324 [Source:HGNC Symbol;Acc:29618] | |
| KIAA1328 | KIAA1328 [Source:HGNC Symbol;Acc:29248] | |
| KIAA1409 | KIAA1409 [Source:HGNC Symbol;Acc:19966] | |
| KIAA1430 | KIAA1430 [Source:HGNC Symbol;Acc:29276] | |
| KIAA1462 | KIAA1462 [Source:HGNC Symbol;Acc:29283] | |

| | | |
|------------------|---|---|
| KIAA1522 | KIAA1522 [Source:HGNC Symbol;Acc:29301] | |
| KIAA1524 | KIAA1524 [Source:HGNC Symbol;Acc:29302] | |
| KIAA1539 | KIAA1539 [Source:HGNC Symbol;Acc:25666] | |
| KIAA1549 | KIAA1549 | √ |
| KIAA1598 | KIAA1598 [Source:HGNC Symbol;Acc:29319] | |
| KIAA1614 | KIAA1614 [Source:HGNC Symbol;Acc:29327] | |
| KIAA1632 | KIAA1632 [Source:HGNC Symbol;Acc:29331] | |
| KIAA1671 | KIAA1671 [Source:HGNC Symbol;Acc:29345] | |
| KIAA1683 | KIAA1683 [Source:HGNC Symbol;Acc:29350] | |
| KIAA1712 | KIAA1712 [Source:HGNC Symbol;Acc:29356] | |
| KIAA1715 | KIAA1715 [Source:HGNC Symbol;Acc:21610] | |
| KIAA1755 | KIAA1755 [Source:HGNC Symbol;Acc:29372] | |
| KIAA1797 | KIAA1797 [Source:HGNC Symbol;Acc:23377] | |
| KIAA1841 | KIAA1841 [Source:HGNC Symbol;Acc:29387] | |
| KIAA1967 | KIAA1967 [Source:HGNC Symbol;Acc:23360] | |
| KIAA2013 | KIAA2013 [Source:HGNC Symbol;Acc:28513] | |
| KIAA2018 | KIAA2018 [Source:HGNC Symbol;Acc:30494] | |
| KIAA2022 | KIAA2022 [Source:HGNC Symbol;Acc:29433] | |
| KIDINS220 | Kinase D-interacting substrate, 220kda [Source:HGNC Symbol;Acc:29508] | |
| KIF12 | Kinesin family member 12 [Source:HGNC Symbol;Acc:21495] | |
| KIF14 | Kinesin family member 14 [Source:HGNC Symbol;Acc:19181] | |
| KIF1A | Kinesin family member 1A [Source:HGNC Symbol;Acc:888] | |
| KIF1B | Kinesin family member 1B [Source:HGNC Symbol;Acc:16636] | |
| KIF1C | Kinesin family member 1C [Source:HGNC Symbol;Acc:6317] | |
| KIF21A | Kinesin family member 21A [Source:HGNC Symbol;Acc:19349] | |
| KIF26A | Kinesin family member 26A [Source:HGNC Symbol;Acc:20226] | |
| KIF26B | Kinesin family member 26B [Source:HGNC Symbol;Acc:25484] | |
| KIF2B | Kinesin family member 2B [Source:HGNC Symbol;Acc:29443] | |
| KIF3A | Kinesin family member 3A [Source:HGNC Symbol;Acc:6319] | |
| KIF3B | Kinesin family member 3B [Source:HGNC Symbol;Acc:6320] | |
| KIF3C | Kinesin family member 3C [Source:HGNC Symbol;Acc:6321] | |
| KIF4A | Kinesin family member 4A [Source:HGNC Symbol;Acc:13339] | |
| KIF4B | Kinesin family member 4B [Source:HGNC Symbol;Acc:6322] | |

| | | |
|----------------|---|---|
| KIF5C | Kinesin family member 5C [Source:HGNC Symbol;Acc:6325] | |
| KIF6 | Kinesin family member 6 [Source:HGNC Symbol;Acc:21202] | |
| KIF9 | Kinesin family member 9 [Source:HGNC Symbol;Acc:16666] | |
| KIR2DL1 | Killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 1 [Source:HGNC Symbol;Acc:6329] | |
| KIRREL | Kin of IRRE like (Drosophila) [Source:HGNC Symbol;Acc:15734] | |
| KIRREL2 | Kin of IRRE like 2 (Drosophila) [Source:HGNC Symbol;Acc:18816] | |
| KIRREL3 | Kin of IRRE like 3 (Drosophila) [Source:HGNC Symbol;Acc:23204] | |
| KIT | V-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog | √ |
| KITLG | KIT ligand [Source:HGNC Symbol;Acc:6343] | |
| KL | Klotho [Source:HGNC Symbol;Acc:6344] | |
| KLB | Klotho beta [Source:HGNC Symbol;Acc:15527] | |
| KLF10 | Kruppel-like factor 10 [Source:HGNC Symbol;Acc:11810] | |
| KLF11 | Kruppel-like factor 11 [Source:HGNC Symbol;Acc:11811] | |
| KLF13 | Kruppel-like factor 13 [Source:HGNC Symbol;Acc:13672] | |
| KLF3 | Kruppel-like factor 3 (basic) [Source:HGNC Symbol;Acc:16516] | |
| KLF5 | Kruppel-like factor 5 (intestinal) [Source:HGNC Symbol;Acc:6349] | |
| KLF6 | Kruppel-like factor 6 [Source:HGNC Symbol;Acc:2235] | |
| KLF7 | Kruppel-like factor 7 (ubiquitous) [Source:HGNC Symbol;Acc:6350] | |
| KLF8 | Kruppel-like factor 8 [Source:HGNC Symbol;Acc:6351] | |
| KLHDC10 | Kelch domain containing 10 [Source:HGNC Symbol;Acc:22194] | |
| KLHDC4 | Kelch domain containing 4 [Source:HGNC Symbol;Acc:25272] | |
| KLHDC5 | Kelch domain containing 5 [Source:HGNC Symbol;Acc:29252] | |
| KLHDC7B | Kelch domain containing 7B [Source:HGNC Symbol;Acc:25145] | |
| KLHL1 | Kelch-like 1 (Drosophila) [Source:HGNC Symbol;Acc:6352] | |
| KLHL10 | Kelch-like 10 (Drosophila) [Source:HGNC Symbol;Acc:18829] | |
| KLHL12 | Kelch-like 12 (Drosophila) [Source:HGNC Symbol;Acc:19360] | |
| KLHL13 | Kelch-like 13 (Drosophila) [Source:HGNC Symbol;Acc:22931] | |
| KLHL15 | Kelch-like 15 (Drosophila) [Source:HGNC Symbol;Acc:29347] | |
| KLHL17 | Kelch-like 17 (Drosophila) [Source:HGNC Symbol;Acc:24023] | |
| KLHL18 | Kelch-like 18 (Drosophila) [Source:HGNC Symbol;Acc:29120] | |
| KLHL20 | Kelch-like 20 (Drosophila) [Source:HGNC Symbol;Acc:25056] | |
| KLHL23 | Kelch-like 23 (Drosophila) [Source:HGNC Symbol;Acc:27506] | |

| | | |
|---------------|---|--|
| KLHL24 | Kelch-like 24 (Drosophila) [Source:HGNC Symbol;Acc:25947] | |
| KLHL25 | Kelch-like 25 (Drosophila) [Source:HGNC Symbol;Acc:25732] | |
| KLHL26 | Kelch-like 26 (Drosophila) [Source:HGNC Symbol;Acc:25623] | |
| KLHL28 | Kelch-like 28 (Drosophila) [Source:HGNC Symbol;Acc:19741] | |
| KLHL3 | Kelch-like 3 (Drosophila) [Source:HGNC Symbol;Acc:6354] | |
| KLHL30 | Kelch-like 30 (Drosophila) [Source:HGNC Symbol;Acc:24770] | |
| KLHL31 | Kelch-like 31 (Drosophila) [Source:HGNC Symbol;Acc:21353] | |
| KLHL33 | Kelch-like 33 (Drosophila) [Source:HGNC Symbol;Acc:31952] | |
| KLHL34 | Kelch-like 34 (Drosophila) [Source:HGNC Symbol;Acc:26634] | |
| KLHL35 | Kelch-like 35 (Drosophila) [Source:HGNC Symbol;Acc:26597] | |
| KLHL36 | Kelch-like 36 (Drosophila) [Source:HGNC Symbol;Acc:17844] | |
| KLHL4 | Kelch-like 4 (Drosophila) [Source:HGNC Symbol;Acc:6355] | |
| KLHL5 | Kelch-like 5 (Drosophila) [Source:HGNC Symbol;Acc:6356] | |
| KLHL6 | Kelch-like 6 (Drosophila) [Source:HGNC Symbol;Acc:18653] | |
| KLHL8 | Kelch-like 8 (Drosophila) [Source:HGNC Symbol;Acc:18644] | |
| KLHL9 | Kelch-like 9 (Drosophila) [Source:HGNC Symbol;Acc:18732] | |
| KLK5 | Kallikrein-related peptidase 5 [Source:HGNC Symbol;Acc:6366] | |
| KLK6 | Kallikrein-related peptidase 6 [Source:HGNC Symbol;Acc:6367] | |
| KLK8 | Kallikrein-related peptidase 8 [Source:HGNC Symbol;Acc:6369] | |
| KLK9 | Kallikrein-related peptidase 9 [Source:HGNC Symbol;Acc:6370] | |
| KLRB1 | Killer cell lectin-like receptor subfamily B, member 1 [Source:HGNC Symbol;Acc:6373] | |
| KLRF1 | Killer cell lectin-like receptor subfamily F, member 1 [Source:HGNC Symbol;Acc:13342] | |
| KLRG2 | Killer cell lectin-like receptor subfamily G, member 2 [Source:HGNC Symbol;Acc:24778] | |
| KNDC1 | Kinase non-catalytic C-lobe domain (KIND) containing 1 [Source:HGNC Symbol;Acc:29374] | |
| KNTC1 | Kinetochore associated 1 [Source:HGNC Symbol;Acc:17255] | |
| KPNA1 | Karyopherin alpha 1 (importin alpha 5) [Source:HGNC Symbol;Acc:6394] | |
| KPNA3 | Karyopherin alpha 3 (importin alpha 4) [Source:HGNC Symbol;Acc:6396] | |
| KPNA4 | Karyopherin alpha 4 (importin alpha 3) [Source:HGNC Symbol;Acc:6397] | |
| KPNA6 | Karyopherin alpha 6 (importin alpha 7) [Source:HGNC Symbol;Acc:6399] | |

| | | |
|----------------|---|---|
| KPNB1 | Karyopherin (importin) beta 1 [Source:HGNC Symbol;Acc:6400] | |
| KPRP | Keratinocyte proline-rich protein [Source:HGNC Symbol;Acc:31823] | |
| KRAS | V-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog | √ |
| KRBA1 | KRAB-A domain containing 1 [Source:HGNC Symbol;Acc:22228] | |
| KRBA2 | KRAB-A domain containing 2 [Source:HGNC Symbol;Acc:26989] | |
| KRBOX1 | KRAB box domain containing 1 [Source:HGNC Symbol;Acc:38708] | |
| KREMEN1 | Kringle containing transmembrane protein 1 [Source:HGNC Symbol;Acc:17550] | |
| KRIT1 | KRIT1, ankyrin repeat containing [Source:HGNC Symbol;Acc:1573] | |
| KRR1 | KRR1, small subunit (SSU) processome component, homolog (yeast) [Source:HGNC Symbol;Acc:5176] | |
| KRT12 | Keratin 12 [Source:HGNC Symbol;Acc:6414] | |
| KRT13 | Keratin 13 [Source:HGNC Symbol;Acc:6415] | |
| KRT15 | Keratin 15 [Source:HGNC Symbol;Acc:6421] | |
| KRT16 | Keratin 16 [Source:HGNC Symbol;Acc:6423] | |
| KRT17 | Keratin 17 [Source:HGNC Symbol;Acc:6427] | |
| KRT20 | Keratin 20 [Source:HGNC Symbol;Acc:20412] | |
| KRT222 | Keratin 222 [Source:HGNC Symbol;Acc:28695] | |
| KRT24 | Keratin 24 [Source:HGNC Symbol;Acc:18527] | |
| KRT26 | Keratin 26 [Source:HGNC Symbol;Acc:30840] | |
| KRT33A | Keratin 33A [Source:HGNC Symbol;Acc:6450] | |
| KRT33B | Keratin 33B [Source:HGNC Symbol;Acc:6451] | |
| KRT35 | Keratin 35 [Source:HGNC Symbol;Acc:6453] | |
| KRT37 | Keratin 37 [Source:HGNC Symbol;Acc:6455] | |
| KRT40 | Keratin 40 [Source:HGNC Symbol;Acc:26707] | |
| KRT6B | Keratin 6B [Source:HGNC Symbol;Acc:6444] | |
| KRT72 | Keratin 72 [Source:HGNC Symbol;Acc:28932] | |
| KRT74 | Keratin 74 [Source:HGNC Symbol;Acc:28929] | |
| KRT80 | Keratin 80 [Source:HGNC Symbol;Acc:27056] | |
| KRT83 | Keratin 83 [Source:HGNC Symbol;Acc:6460] | |
| KRT84 | Keratin 84 [Source:HGNC Symbol;Acc:6461] | |
| KRT85 | Keratin 85 [Source:HGNC Symbol;Acc:6462] | |
| KRT8P11 | Keratin 8 pseudogene 11 [Source:HGNC Symbol;Acc:31058] | |

| | | |
|-------------------|--|--|
| KRT9 | Keratin 9 [Source:HGNC Symbol;Acc:6447] | |
| KRTAP10-10 | Keratin associated protein 10-10 [Source:HGNC Symbol;Acc:22972] | |
| KRTAP10-6 | Keratin associated protein 10-6 [Source:HGNC Symbol;Acc:20523] | |
| KRTAP26-1 | Keratin associated protein 26-1 [Source:HGNC Symbol;Acc:33760] | |
| KRTAP3-1 | Keratin associated protein 3-1 [Source:HGNC Symbol;Acc:16778] | |
| KRTAP5-2 | Keratin associated protein 5-2 [Source:HGNC Symbol;Acc:23597] | |
| KRTCAP2 | Keratinocyte associated protein 2 [Source:HGNC Symbol;Acc:28942] | |
| KSR1 | Kinase suppressor of ras 1 [Source:HGNC Symbol;Acc:6465] | |
| KSR2 | Kinase suppressor of ras 2 [Source:HGNC Symbol;Acc:18610] | |
| L2HGDH | L-2-hydroxyglutarate dehydrogenase [Source:HGNC Symbol;Acc:20499] | |
| L3MBTL1 | L(3)mbt-like 1 (Drosophila) [Source:HGNC Symbol;Acc:15905] | |
| LACE1 | Lactation elevated 1 [Source:HGNC Symbol;Acc:16411] | |
| LACTB | Lactamase, beta [Source:HGNC Symbol;Acc:16468] | |
| LAMA1 | Laminin, alpha 1 [Source:HGNC Symbol;Acc:6481] | |
| LAMA2 | Laminin, alpha 2 [Source:HGNC Symbol;Acc:6482] | |
| LAMA3 | Laminin, alpha 3 [Source:HGNC Symbol;Acc:6483] | |
| LAMA4 | Laminin, alpha 4 [Source:HGNC Symbol;Acc:6484] | |
| LAMA5 | Laminin, alpha 5 [Source:HGNC Symbol;Acc:6485] | |
| LAMB2 | Laminin, beta 2 (laminin S) [Source:HGNC Symbol;Acc:6487] | |
| LAMB3 | Laminin, beta 3 [Source:HGNC Symbol;Acc:6490] | |
| LAMC1 | Laminin, gamma 1 (formerly LAMB2) [Source:HGNC Symbol;Acc:6492] | |
| LAMC2 | Laminin, gamma 2 [Source:HGNC Symbol;Acc:6493] | |
| LAMP2 | Lysosomal-associated membrane protein 2 [Source:HGNC Symbol;Acc:6501] | |
| LAMTOR3 | Late endosomal/lysosomal adaptor, MAPK and MTOR activator 3 [Source:HGNC Symbol;Acc:15606] | |
| LANCL1 | Lanc lantibiotic synthetase component C-like 1 (bacterial) [Source:HGNC Symbol;Acc:6508] | |
| LAP3 | Leucine aminopeptidase 3 [Source:HGNC Symbol;Acc:18449] | |
| LARGE | Like-glycosyltransferase [Source:HGNC Symbol;Acc:6511] | |
| LARP6 | La ribonucleoprotein domain family, member 6 [Source:HGNC Symbol;Acc:24012] | |
| LARS2 | Leucyl-trna synthetase 2, mitochondrial [Source:HGNC Symbol;Acc:17095] | |

| | | |
|----------------|---|---|
| LAS1L | LAS1-like (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:25726] | |
| LASP1 | LIM and SH3 protein 1 | √ |
| LASS1 | LAG1 homolog, ceramide synthase 1 [Source:HGNC Symbol;Acc:14253] | |
| LASS3 | LAG1 homolog, ceramide synthase 3 [Source:HGNC Symbol;Acc:23752] | |
| LAT2 | Linker for activation of T cells family, member 2 [Source:HGNC Symbol;Acc:12749] | |
| LATS1 | LATS, large tumor suppressor, homolog 1 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:6514] | |
| LATS2 | LATS, large tumor suppressor, homolog 2 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:6515] | |
| LAX1 | Lymphocyte transmembrane adaptor 1 [Source:HGNC Symbol;Acc:26005] | |
| LCE2A | Late cornified envelope 2A [Source:HGNC Symbol;Acc:29469] | |
| LCE2B | Late cornified envelope 2B [Source:HGNC Symbol;Acc:16610] | |
| LCN10 | Lipocalin 10 [Source:HGNC Symbol;Acc:20892] | |
| LCN2 | Lipocalin 2 [Source:HGNC Symbol;Acc:6526] | |
| LCOR | Ligand dependent nuclear receptor corepressor [Source:HGNC Symbol;Acc:29503] | |
| LCORL | Ligand dependent nuclear receptor corepressor-like [Source:HGNC Symbol;Acc:30776] | |
| LCPI | Lymphocyte cytosolic protein 1 (L-plastin) | √ |
| LDHC | Lactate dehydrogenase C [Source:HGNC Symbol;Acc:6544] | |
| LDLR | Low density lipoprotein receptor [Source:HGNC Symbol;Acc:6547] | |
| LDLRAD2 | Low density lipoprotein receptor class A domain containing 2 [Source:HGNC Symbol;Acc:32071] | |
| LDLRAD3 | Low density lipoprotein receptor class A domain containing 3 [Source:HGNC Symbol;Acc:27046] | |
| LDLRAP1 | Low density lipoprotein receptor adaptor protein 1 [Source:HGNC Symbol;Acc:18640] | |
| LEAP2 | Liver expressed antimicrobial peptide 2 [Source:HGNC Symbol;Acc:29571] | |
| LEMD1 | LEM domain containing 1 [Source:HGNC Symbol;Acc:18725] | |
| LEP | Leptin [Source:HGNC Symbol;Acc:6553] | |
| LEPR | Leptin receptor [Source:HGNC Symbol;Acc:6554] | |

| | | |
|-----------------|--|---|
| LEPRE1 | Leucine proline-enriched proteoglycan (leprecan) 1 [Source:HGNC Symbol;Acc:19316] | |
| LEPREL1 | Leprecan-like 1 [Source:HGNC Symbol;Acc:19317] | |
| LEPREL2 | Leprecan-like 2 [Source:HGNC Symbol;Acc:19318] | |
| LETMD1 | LETM1 domain containing 1 [Source:HGNC Symbol;Acc:24241] | |
| LGALS12 | Lectin, galactoside-binding, soluble, 12 [Source:HGNC Symbol;Acc:15788] | |
| LGALS3BP | Lectin, galactoside-binding, soluble, 3 binding protein [Source:HGNC Symbol;Acc:6564] | |
| LGALS4 | Lectin, galactoside-binding, soluble, 4 [Source:HGNC Symbol;Acc:6565] | |
| LGALS9 | Lectin, galactoside-binding, soluble, 9 [Source:HGNC Symbol;Acc:6570] | |
| LGALS9C | Lectin, galactoside-binding, soluble, 9C [Source:HGNC Symbol;Acc:33874] | |
| LGI2 | Leucine-rich repeat LGI family, member 2 [Source:HGNC Symbol;Acc:18710] | |
| LGMN | Legumain [Source:HGNC Symbol;Acc:9472] | |
| LGR4 | Leucine-rich repeat containing G protein-coupled receptor 4 [Source:HGNC Symbol;Acc:13299] | |
| LHCGR | Luteinizing hormone/choriogonadotropin receptor [Source:HGNC Symbol;Acc:6585] | |
| LHFPL2 | Lipoma HMGIC fusion partner-like 2 [Source:HGNC Symbol;Acc:6588] | |
| LHFPL3 | Lipoma HMGIC fusion partner-like 3 [Source:HGNC Symbol;Acc:6589] | |
| LHX4 | LIM homeobox 4 [Source:HGNC Symbol;Acc:21734] | |
| LHX6 | LIM homeobox 6 [Source:HGNC Symbol;Acc:21735] | |
| LHX8 | LIM homeobox 8 [Source:HGNC Symbol;Acc:28838] | |
| LIFR | Leukemia inhibitory factor receptor alpha | √ |
| LIMD1 | LIM domains containing 1 [Source:HGNC Symbol;Acc:6612] | |
| LIME1 | Lck interacting transmembrane adaptor 1 [Source:HGNC Symbol;Acc:26016] | |
| LIMS1 | LIM and senescent cell antigen-like domains 1 [Source:HGNC Symbol;Acc:6616] | |
| LIN28B | Lin-28 homolog B (C. Elegans) [Source:HGNC Symbol;Acc:32207] | |
| LIN37 | Lin-37 homolog (C. Elegans) [Source:HGNC Symbol;Acc:33234] | |
| LIN54 | Lin-54 homolog (C. Elegans) [Source:HGNC Symbol;Acc:25397] | |
| LIN7A | Lin-7 homolog A (C. Elegans) [Source:HGNC Symbol;Acc:17787] | |

| | | |
|-----------------|--|--|
| LIPA | Lipase A, lysosomal acid, cholesterol esterase [Source:HGNC Symbol;Acc:6617] | |
| LIPF | Lipase, gastric [Source:HGNC Symbol;Acc:6622] | |
| LITAF | Lipopolysaccharide-induced TNF factor [Source:HGNC Symbol;Acc:16841] | |
| LIX1L | Lix1 homolog (mouse)-like [Source:HGNC Symbol;Acc:28715] | |
| LMAN1 | Lectin, mannose-binding, 1 [Source:HGNC Symbol;Acc:6631] | |
| LMAN2L | Lectin, mannose-binding 2-like [Source:HGNC Symbol;Acc:19263] | |
| LMBRD1 | LMBR1 domain containing 1 [Source:HGNC Symbol;Acc:23038] | |
| LMCD1 | LIM and cysteine-rich domains 1 [Source:HGNC Symbol;Acc:6633] | |
| LMLN | Leishmanolysin-like (metallopeptidase M8 family) [Source:HGNC Symbol;Acc:15991] | |
| LMO3 | LIM domain only 3 (rhombotin-like 2) [Source:HGNC Symbol;Acc:6643] | |
| LMO4 | LIM domain only 4 [Source:HGNC Symbol;Acc:6644] | |
| LMO7 | LIM domain 7 [Source:HGNC Symbol;Acc:6646] | |
| LMOD1 | Leiomodin 1 (smooth muscle) [Source:HGNC Symbol;Acc:6647] | |
| LMOD3 | Leiomodin 3 (fetal) [Source:HGNC Symbol;Acc:6649] | |
| LMTK2 | Lemur tyrosine kinase 2 [Source:HGNC Symbol;Acc:17880] | |
| LMX1A | LIM homeobox transcription factor 1, alpha [Source:HGNC Symbol;Acc:6653] | |
| LMX1B | LIM homeobox transcription factor 1, beta [Source:HGNC Symbol;Acc:6654] | |
| LOH12CR2 | Loss of heterozygosity, 12, chromosomal region 2 [Source:HGNC Symbol;Acc:26524] | |
| LONP1 | Lon peptidase 1, mitochondrial [Source:HGNC Symbol;Acc:9479] | |
| LONRF1 | LON peptidase N-terminal domain and ring finger 1 [Source:HGNC Symbol;Acc:26302] | |
| LONRF2 | LON peptidase N-terminal domain and ring finger 2 [Source:HGNC Symbol;Acc:24788] | |
| LONRF3 | LON peptidase N-terminal domain and ring finger 3 [Source:HGNC Symbol;Acc:21152] | |
| LOX | Lysyl oxidase [Source:HGNC Symbol;Acc:6664] | |
| LOXL3 | Lysyl oxidase-like 3 [Source:HGNC Symbol;Acc:13869] | |

| | | |
|---------------|---|---|
| LOXL4 | Lysyl oxidase-like 4 [Source:HGNC Symbol;Acc:17171] | |
| LPA | Lipoprotein, Lp(a) [Source:HGNC Symbol;Acc:6667] | |
| LPAR2 | Lysophosphatidic acid receptor 2 [Source:HGNC Symbol;Acc:3168] | |
| LPCAT1 | Lysophosphatidylcholine acyltransferase 1 [Source:HGNC Symbol;Acc:25718] | |
| LPCAT4 | Lysophosphatidylcholine acyltransferase 4 [Source:HGNC Symbol;Acc:30059] | |
| LPGAT1 | Lysophosphatidylglycerol acyltransferase 1 [Source:HGNC Symbol;Acc:28985] | |
| LPHN3 | Latrophilin 3 [Source:HGNC Symbol;Acc:20974] | |
| LPIN1 | Lipin 1 [Source:HGNC Symbol;Acc:13345] | |
| LPIN2 | Lipin 2 [Source:HGNC Symbol;Acc:14450] | |
| LPIN3 | Lipin 3 [Source:HGNC Symbol;Acc:14451] | |
| LPL | Lipoprotein lipase [Source:HGNC Symbol;Acc:6677] | |
| LPO | Lactoperoxidase [Source:HGNC Symbol;Acc:6678] | |
| LPP | LIM domain containing preferred translocation partner in lipoma | √ |
| LPXN | Leupaxin [Source:HGNC Symbol;Acc:14061] | |
| LRBA | LPS-responsive vesicle trafficking, beach and anchor containing [Source:HGNC Symbol;Acc:1742] | |
| LRDD | Leucine-rich repeats and death domain containing [Source:HGNC Symbol;Acc:16491] | |
| LRFN1 | Leucine rich repeat and fibronectin type III domain containing 1 [Source:HGNC Symbol;Acc:29290] | |
| LRFN2 | Leucine rich repeat and fibronectin type III domain containing 2 [Source:HGNC Symbol;Acc:21226] | |
| LRGUK | Leucine-rich repeats and guanylate kinase domain containing [Source:HGNC Symbol;Acc:21964] | |
| LRIG1 | Leucine-rich repeats and immunoglobulin-like domains 1 [Source:HGNC Symbol;Acc:17360] | |
| LRIT3 | Leucine-rich repeat, immunoglobulin-like and transmembrane domains 3 [Source:HGNC Symbol;Acc:24783] | |
| LRP1 | Low density lipoprotein receptor-related protein 1 [Source:HGNC Symbol;Acc:6692] | |

| | | |
|----------------|---|--|
| LRP10 | Low density lipoprotein receptor-related protein 10 [Source:HGNC Symbol;Acc:14553] | |
| LRP11 | Low density lipoprotein receptor-related protein 11 [Source:HGNC Symbol;Acc:16936] | |
| LRP12 | Low density lipoprotein receptor-related protein 12 [Source:HGNC Symbol;Acc:31708] | |
| LRP1B | Low density lipoprotein receptor-related protein 1B [Source:HGNC Symbol;Acc:6693] | |
| LRP2 | Low density lipoprotein receptor-related protein 2 [Source:HGNC Symbol;Acc:6694] | |
| LRP2BP | LRP2 binding protein [Source:HGNC Symbol;Acc:25434] | |
| LRP4 | Low density lipoprotein receptor-related protein 4 [Source:HGNC Symbol;Acc:6696] | |
| LRP6 | Low density lipoprotein receptor-related protein 6 [Source:HGNC Symbol;Acc:6698] | |
| LRP8 | Low density lipoprotein receptor-related protein 8, apolipoprotein e receptor [Source:HGNC Symbol;Acc:6700] | |
| LRPAP1 | Low density lipoprotein receptor-related protein associated protein 1 [Source:HGNC Symbol;Acc:6701] | |
| LRR1 | Leucine rich repeat protein 1 [Source:HGNC Symbol;Acc:19742] | |
| LRRC1 | Leucine rich repeat containing 1 [Source:HGNC Symbol;Acc:14307] | |
| LRRC10 | Leucine rich repeat containing 10 [Source:HGNC Symbol;Acc:20264] | |
| LRRC15 | Leucine rich repeat containing 15 [Source:HGNC Symbol;Acc:20818] | |
| LRRC16A | Leucine rich repeat containing 16A [Source:HGNC Symbol;Acc:21581] | |
| LRRC19 | Leucine rich repeat containing 19 [Source:HGNC Symbol;Acc:23379] | |
| LRRC25 | Leucine rich repeat containing 25 [Source:HGNC Symbol;Acc:29806] | |
| LRRC27 | Leucine rich repeat containing 27 [Source:HGNC Symbol;Acc:29346] | |
| LRRC28 | Leucine rich repeat containing 28 [Source:HGNC Symbol;Acc:28355] | |
| LRRC29 | Leucine rich repeat containing 29 [Source:HGNC Symbol;Acc:13605] | |
| LRRC31 | Leucine rich repeat containing 31 [Source:HGNC Symbol;Acc:26261] | |
| LRRC36 | Leucine rich repeat containing 36 [Source:HGNC Symbol;Acc:25615] | |
| LRRC37A | Leucine rich repeat containing 37A [Source:HGNC Symbol;Acc:29069] | |
| LRRC38 | Leucine rich repeat containing 38 [Source:HGNC Symbol;Acc:27005] | |

| | | |
|----------------|---|--|
| LRRC49 | Leucine rich repeat containing 49 [Source:HGNC Symbol;Acc:25965] | |
| LRRC4C | Leucine rich repeat containing 4C [Source:HGNC Symbol;Acc:29317] | |
| LRRC58 | Leucine rich repeat containing 58 [Source:HGNC Symbol;Acc:26968] | |
| LRRC59 | Leucine rich repeat containing 59 [Source:HGNC Symbol;Acc:28817] | |
| LRRC66 | Leucine rich repeat containing 66 [Source:HGNC Symbol;Acc:34299] | |
| LRRC7 | Leucine rich repeat containing 7 [Source:HGNC Symbol;Acc:18531] | |
| LRRC70 | Leucine rich repeat containing 70 [Source:HGNC Symbol;Acc:35155] | |
| LRRC8A | Leucine rich repeat containing 8 family, member A [Source:HGNC Symbol;Acc:19027] | |
| LRRC8D | Leucine rich repeat containing 8 family, member D [Source:HGNC Symbol;Acc:16992] | |
| LRRC8E | Leucine rich repeat containing 8 family, member E [Source:HGNC Symbol;Acc:26272] | |
| LRRFIP1 | Leucine rich repeat (in FLII) interacting protein 1 [Source:HGNC Symbol;Acc:6702] | |
| LRRFIP2 | Leucine rich repeat (in FLII) interacting protein 2 [Source:HGNC Symbol;Acc:6703] | |
| LRRIQ3 | Leucine-rich repeats and IQ motif containing 3 [Source:HGNC Symbol;Acc:28318] | |
| LRRK2 | Leucine-rich repeat kinase 2 [Source:HGNC Symbol;Acc:18618] | |
| LRRN1 | Leucine rich repeat neuronal 1 [Source:HGNC Symbol;Acc:20980] | |
| LRRN2 | Leucine rich repeat neuronal 2 [Source:HGNC Symbol;Acc:16914] | |
| LRRN3 | Leucine rich repeat neuronal 3 [Source:HGNC Symbol;Acc:17200] | |
| LRTOMT | Leucine rich transmembrane and O-methyltransferase domain containing [Source:HGNC Symbol;Acc:25033] | |
| LRWD1 | Leucine-rich repeats and WD repeat domain containing 1 [Source:HGNC Symbol;Acc:21769] | |
| LSAMP | Limbic system-associated membrane protein [Source:HGNC Symbol;Acc:6705] | |
| LSM11 | LSM11, U7 small nuclear RNA associated [Source:HGNC Symbol;Acc:30860] | |
| LSM6 | LSM6 homolog, U6 small nuclear RNA associated (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:17017] | |

| | | |
|---------------|--|--|
| LSS | Lanosterol synthase (2,3-oxidosqualene-lanosterol cyclase) [Source:HGNC Symbol;Acc:6708] | |
| LTB4R | Leukotriene B4 receptor [Source:HGNC Symbol;Acc:6713] | |
| LTBP1 | Latent transforming growth factor beta binding protein 1 [Source:HGNC Symbol;Acc:6714] | |
| LTBP2 | Latent transforming growth factor beta binding protein 2 [Source:HGNC Symbol;Acc:6715] | |
| LTBP3 | Latent transforming growth factor beta binding protein 3 [Source:HGNC Symbol;Acc:6716] | |
| LTBP4 | Latent transforming growth factor beta binding protein 4 [Source:HGNC Symbol;Acc:6717] | |
| LTF | Lactotransferrin [Source:HGNC Symbol;Acc:6720] | |
| LTK | Leukocyte receptor tyrosine kinase [Source:HGNC Symbol;Acc:6721] | |
| LTV1 | LTV1 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:21173] | |
| LUZP1 | Leucine zipper protein 1 [Source:HGNC Symbol;Acc:14985] | |
| LY6G6E | Lymphocyte antigen 6 complex, locus G6E [Source:HGNC Symbol;Acc:13934] | |
| LY75 | Lymphocyte antigen 75 [Source:HGNC Symbol;Acc:6729] | |
| LYG1 | Lysozyme G-like 1 [Source:HGNC Symbol;Acc:27014] | |
| LYG2 | Lysozyme G-like 2 [Source:HGNC Symbol;Acc:29615] | |
| LYN | V-yes-1 Yamaguchi sarcoma viral related oncogene homolog [Source:HGNC Symbol;Acc:6735] | |
| LYNX1 | Ly6/neurotoxin 1 [Source:HGNC Symbol;Acc:29604] | |
| LYPLA2 | Lysophospholipase II [Source:HGNC Symbol;Acc:6738] | |
| LYRM2 | LYR motif containing 2 [Source:HGNC Symbol;Acc:25229] | |
| LYRM4 | LYR motif containing 4 [Source:HGNC Symbol;Acc:21365] | |
| LYSMD1 | Lysm, putative peptidoglycan-binding, domain containing 1 [Source:HGNC Symbol;Acc:32070] | |
| LYSMD3 | Lysm, putative peptidoglycan-binding, domain containing 3 [Source:HGNC Symbol;Acc:26969] | |
| LYST | Lysosomal trafficking regulator [Source:HGNC Symbol;Acc:1968] | |
| LYVE1 | Lymphatic vessel endothelial hyaluronan receptor 1 [Source:HGNC Symbol;Acc:14687] | |

| | | |
|----------------|--|---|
| LYZL1 | Lysozyme-like 1 [Source:HGNC Symbol;Acc:30502] | |
| LYZL2 | Lysozyme-like 2 [Source:HGNC Symbol;Acc:29613] | |
| LZTS1 | Leucine zipper, putative tumor suppressor 1 [Source:HGNC Symbol;Acc:13861] | |
| LZTS2 | Leucine zipper, putative tumor suppressor 2 [Source:HGNC Symbol;Acc:29381] | |
| MAB21L1 | Mab-21-like 1 (C. Elegans) [Source:HGNC Symbol;Acc:6757] | |
| MACF1 | Microtubule-actin crosslinking factor 1 [Source:HGNC Symbol;Acc:13664] | |
| MADD | MAP-kinase activating death domain [Source:HGNC Symbol;Acc:6766] | |
| MAF | V-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian) | √ |
| MAFG | V-maf musculoaponeurotic fibrosarcoma oncogene homolog G (avian) [Source:HGNC Symbol;Acc:6781] | |
| MAGEA1 | Melanoma antigen family A, 1 (directs expression of antigen MZ2-E) [Source:HGNC Symbol;Acc:6796] | |
| MAGEA10 | Melanoma antigen family A, 10 [Source:HGNC Symbol;Acc:6797] | |
| MAGEA4 | Melanoma antigen family A, 4 [Source:HGNC Symbol;Acc:6802] | |
| MAGEA9 | Melanoma antigen family A, 9 [Source:HGNC Symbol;Acc:6807] | |
| MAGEA9B | Melanoma antigen family A, 9B [Source:HGNC Symbol;Acc:31909] | |
| MAGEB16 | Melanoma antigen family B, 16 [Source:HGNC Symbol;Acc:21188] | |
| MAGEB2 | Melanoma antigen family B, 2 [Source:HGNC Symbol;Acc:6809] | |
| MAGEB3 | Melanoma antigen family B, 3 [Source:HGNC Symbol;Acc:6810] | |
| MAGEB6 | Melanoma antigen family B, 6 [Source:HGNC Symbol;Acc:23796] | |
| MAGEC1 | Melanoma antigen family C, 1 [Source:HGNC Symbol;Acc:6812] | |
| MAGEC3 | Melanoma antigen family C, 3 [Source:HGNC Symbol;Acc:23798] | |
| MAGEE1 | Melanoma antigen family E, 1 [Source:HGNC Symbol;Acc:24934] | |
| MAGEE2 | Melanoma antigen family E, 2 [Source:HGNC Symbol;Acc:24935] | |
| MAGEL2 | MAGE-like 2 [Source:HGNC Symbol;Acc:6814] | |
| MAGI3 | Membrane associated guanylate kinase, WW and PDZ domain containing 3 [Source:HGNC Symbol;Acc:29647] | |
| MAK | Male germ cell-associated kinase [Source:HGNC Symbol;Acc:6816] | |
| MAK16 | MAK16 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:13703] | |
| MALT1 | Mucosa associated lymphoid tissue lymphoma translocation gene 1 | √ |
| MAMDC2 | MAM domain containing 2 [Source:HGNC Symbol;Acc:23673] | |

| | | |
|----------------|---|---|
| MAML1 | Mastermind-like 1 (Drosophila) [Source:HGNC Symbol;Acc:13632] | |
| MAML2 | Mastermind-like 2 (Drosophila) | √ |
| MAN1A1 | Mannosidase, alpha, class 1A, member 1 [Source:HGNC Symbol;Acc:6821] | |
| MAN1A2 | Mannosidase, alpha, class 1A, member 2 [Source:HGNC Symbol;Acc:6822] | |
| MAN1B1 | Mannosidase, alpha, class 1B, member 1 [Source:HGNC Symbol;Acc:6823] | |
| MAN1C1 | Mannosidase, alpha, class 1C, member 1 [Source:HGNC Symbol;Acc:19080] | |
| MAN2A1 | Mannosidase, alpha, class 2A, member 1 [Source:HGNC Symbol;Acc:6824] | |
| MAN2B2 | Mannosidase, alpha, class 2B, member 2 [Source:HGNC Symbol;Acc:29623] | |
| MAN2C1 | Mannosidase, alpha, class 2C, member 1 [Source:HGNC Symbol;Acc:6827] | |
| MANBA | Mannosidase, beta A, lysosomal [Source:HGNC Symbol;Acc:6831] | |
| MAOA | Monoamine oxidase A [Source:HGNC Symbol;Acc:6833] | |
| MAP1B | Microtubule-associated protein 1B [Source:HGNC Symbol;Acc:6836] | |
| MAP1S | Microtubule-associated protein 1S [Source:HGNC Symbol;Acc:15715] | |
| MAP2 | Microtubule-associated protein 2 [Source:HGNC Symbol;Acc:6839] | |
| MAP2K1 | Mitogen-activated protein kinase kinase 1 | √ |
| MAP2K3 | Mitogen-activated protein kinase kinase 3 [Source:HGNC Symbol;Acc:6843] | |
| MAP2K5 | Mitogen-activated protein kinase kinase 5 [Source:HGNC Symbol;Acc:6845] | |
| MAP3K1 | Mitogen-activated protein kinase kinase kinase 1 [Source:HGNC Symbol;Acc:6848] | |
| MAP3K10 | Mitogen-activated protein kinase kinase kinase 10 [Source:HGNC Symbol;Acc:6849] | |
| MAP3K12 | Mitogen-activated protein kinase kinase kinase 12 [Source:HGNC Symbol;Acc:6851] | |

| | | |
|----------------|---|--|
| MAP3K13 | Mitogen-activated protein kinase kinase kinase 13 [Source:HGNC Symbol;Acc:6852] | |
| MAP3K14 | Mitogen-activated protein kinase kinase kinase 14 [Source:HGNC Symbol;Acc:6853] | |
| MAP3K2 | Mitogen-activated protein kinase kinase kinase 2 [Source:HGNC Symbol;Acc:6854] | |
| MAP3K3 | Mitogen-activated protein kinase kinase kinase 3 [Source:HGNC Symbol;Acc:6855] | |
| MAP3K4 | Mitogen-activated protein kinase kinase kinase 4 [Source:HGNC Symbol;Acc:6856] | |
| MAP3K5 | Mitogen-activated protein kinase kinase kinase 5 [Source:HGNC Symbol;Acc:6857] | |
| MAP3K6 | Mitogen-activated protein kinase kinase kinase 6 [Source:HGNC Symbol;Acc:6858] | |
| MAP3K9 | Mitogen-activated protein kinase kinase kinase 9 [Source:HGNC Symbol;Acc:6861] | |
| MAP4K1 | Mitogen-activated protein kinase kinase kinase kinase 1 [Source:HGNC Symbol;Acc:6863] | |
| MAP4K2 | Mitogen-activated protein kinase kinase kinase kinase 2 [Source:HGNC Symbol;Acc:6864] | |
| MAP4K3 | Mitogen-activated protein kinase kinase kinase kinase 3 [Source:HGNC Symbol;Acc:6865] | |
| MAP4K5 | Mitogen-activated protein kinase kinase kinase kinase 5 [Source:HGNC Symbol;Acc:6867] | |
| MAP7 | Microtubule-associated protein 7 [Source:HGNC Symbol;Acc:6869] | |
| MAP9 | Microtubule-associated protein 9 [Source:HGNC Symbol;Acc:26118] | |
| MAPK1 | Mitogen-activated protein kinase 1 [Source:HGNC Symbol;Acc:6871] | |
| MAPK10 | Mitogen-activated protein kinase 10 [Source:HGNC Symbol;Acc:6872] | |
| MAPK11 | Mitogen-activated protein kinase 11 [Source:HGNC Symbol;Acc:6873] | |
| MAPK12 | Mitogen-activated protein kinase 12 [Source:HGNC Symbol;Acc:6874] | |
| MAPK13 | Mitogen-activated protein kinase 13 [Source:HGNC Symbol;Acc:6875] | |
| MAPK15 | Mitogen-activated protein kinase 15 [Source:HGNC Symbol;Acc:24667] | |
| MAPK6 | Mitogen-activated protein kinase 6 [Source:HGNC Symbol;Acc:6879] | |

| | | |
|-----------------|---|--|
| MAPK8 | Mitogen-activated protein kinase 8 [Source:HGNC Symbol;Acc:6881] | |
| MAPK8IP1 | Mitogen-activated protein kinase 8 interacting protein 1 [Source:HGNC Symbol;Acc:6882] | |
| MAPK8IP2 | Mitogen-activated protein kinase 8 interacting protein 2 [Source:HGNC Symbol;Acc:6883] | |
| MAPK8IP3 | Mitogen-activated protein kinase 8 interacting protein 3 [Source:HGNC Symbol;Acc:6884] | |
| MAPKAPK5 | Mitogen-activated protein kinase-activated protein kinase 5 [Source:HGNC Symbol;Acc:6889] | |
| MAPKBP1 | Mitogen-activated protein kinase binding protein 1 [Source:HGNC Symbol;Acc:29536] | |
| MAPRE2 | Microtubule-associated protein, RP/EB family, member 2 [Source:HGNC Symbol;Acc:6891] | |
| MARCH10 | Septin 7 [Source:HGNC Symbol;Acc:1717] | |
| MARCH11 | Septin 7 [Source:HGNC Symbol;Acc:1717] | |
| MARCH12 | Septin 7 [Source:HGNC Symbol;Acc:1717] | |
| MARCH13 | Septin 10 [Source:HGNC Symbol;Acc:14349] | |
| MARCH14 | Septin 10 [Source:HGNC Symbol;Acc:14349] | |
| MARCH15 | Septin 10 [Source:HGNC Symbol;Acc:14349] | |
| MARCH16 | Septin 10 [Source:HGNC Symbol;Acc:14349] | |
| MARCH17 | Septin 10 [Source:HGNC Symbol;Acc:14349] | |
| MARCH18 | Septin 10 [Source:HGNC Symbol;Acc:14349] | |
| MARCH19 | Septin 10 [Source:HGNC Symbol;Acc:14349] | |
| MARCH20 | Septin 10 [Source:HGNC Symbol;Acc:14349] | |
| MARCH21 | Septin 11 [Source:HGNC Symbol;Acc:25589] | |
| MARCH22 | Septin 14 [Source:HGNC Symbol;Acc:33280] | |
| MARCH3 | Membrane-associated ring finger (C3HC4) 3 [Source:HGNC Symbol;Acc:28728] | |
| MARCH4 | Membrane-associated ring finger (C3HC4) 8 [Source:HGNC Symbol;Acc:23356] | |
| MARCH5 | Membrane-associated ring finger (C3HC4) 9 [Source:HGNC Symbol;Acc:25139] | |

| | | |
|-----------------|---|---|
| MARCH6 | Membrane-associated ring finger (C3HC4) 11 [Source:HGNC Symbol;Acc:33609] | |
| MARCH7 | Septin 3 [Source:HGNC Symbol;Acc:10750] | |
| MARCH8 | Septin 3 [Source:HGNC Symbol;Acc:10750] | |
| MARCH9 | Septin 5 [Source:HGNC Symbol;Acc:9164] | |
| MARCKS | Myristoylated alanine-rich protein kinase C substrate [Source:HGNC Symbol;Acc:6759] | |
| MARCO | Macrophage receptor with collagenous structure [Source:HGNC Symbol;Acc:6895] | |
| MARK1 | MAP/microtubule affinity-regulating kinase 1 [Source:HGNC Symbol;Acc:6896] | |
| MARS | Methionyl-trna synthetase [Source:HGNC Symbol;Acc:6898] | |
| MARVELD2 | MARVEL domain containing 2 [Source:HGNC Symbol;Acc:26401] | |
| MAST1 | Microtubule associated serine/threonine kinase 1 [Source:HGNC Symbol;Acc:19034] | |
| MAST3 | Microtubule associated serine/threonine kinase 3 [Source:HGNC Symbol;Acc:19036] | |
| MAST4 | Microtubule associated serine/threonine kinase family member 4 [Source:HGNC Symbol;Acc:19037] | |
| MASTL | Microtubule associated serine/threonine kinase-like [Source:HGNC Symbol;Acc:19042] | |
| MAT1A | Methionine adenosyltransferase I, alpha [Source:HGNC Symbol;Acc:6903] | |
| MAT2A | Methionine adenosyltransferase II, alpha [Source:HGNC Symbol;Acc:6904] | |
| MATN1 | Matrilin 1, cartilage matrix protein [Source:HGNC Symbol;Acc:6907] | |
| MATN2 | Matrilin 2 [Source:HGNC Symbol;Acc:6908] | |
| MATN3 | Matrilin 3 [Source:HGNC Symbol;Acc:6909] | |
| MAU2 | MAU2 chromatid cohesion factor homolog (C. Elegans) [Source:HGNC Symbol;Acc:29140] | |
| MAX | MYC associated factor X | √ |
| MB | Myoglobin [Source:HGNC Symbol;Acc:6915] | |
| MBD1 | Methyl-cpg binding domain protein 1 [Source:HGNC Symbol;Acc:6916] | |
| MBD3 | Methyl-cpg binding domain protein 3 [Source:HGNC Symbol;Acc:6918] | |
| MBNL1 | Muscleblind-like (Drosophila) [Source:HGNC Symbol;Acc:6923] | |

| | | |
|---------------|---|--|
| MBNL3 | Muscleblind-like 3 (Drosophila) [Source:HGNC Symbol;Acc:20564] | |
| MBP | Myelin basic protein [Source:HGNC Symbol;Acc:6925] | |
| MBTD1 | Mbt domain containing 1 [Source:HGNC Symbol;Acc:19866] | |
| MBTPS1 | Membrane-bound transcription factor peptidase, site 1 [Source:HGNC Symbol;Acc:15456] | |
| MC2R | Melanocortin 2 receptor (adrenocorticotropic hormone) [Source:HGNC Symbol;Acc:6930] | |
| MCAM | Melanoma cell adhesion molecule [Source:HGNC Symbol;Acc:6934] | |
| MCART1 | Mitochondrial carrier triple repeat 1 [Source:HGNC Symbol;Acc:23323] | |
| MCC | Mutated in colorectal cancers [Source:HGNC Symbol;Acc:6935] | |
| MCCC1 | Methylcrotonoyl-coa carboxylase 1 (alpha) [Source:HGNC Symbol;Acc:6936] | |
| MCF2L2 | MCF.2 cell line derived transforming sequence-like 2 [Source:HGNC Symbol;Acc:30319] | |
| MCFD2 | Multiple coagulation factor deficiency 2 [Source:HGNC Symbol;Acc:18451] | |
| MCHR1 | Melanin-concentrating hormone receptor 1 [Source:HGNC Symbol;Acc:4479] | |
| MCHR2 | Melanin-concentrating hormone receptor 2 [Source:HGNC Symbol;Acc:20867] | |
| MCL1 | Myeloid cell leukemia sequence 1 (BCL2-related) [Source:HGNC Symbol;Acc:6943] | |
| MCM10 | Minichromosome maintenance complex component 10 [Source:HGNC Symbol;Acc:18043] | |
| MCM3AP | Minichromosome maintenance complex component 3 associated protein [Source:HGNC Symbol;Acc:6946] | |
| MCM4 | Minichromosome maintenance complex component 4 [Source:HGNC Symbol;Acc:6947] | |
| MCM6 | Minichromosome maintenance complex component 6 [Source:HGNC Symbol;Acc:6949] | |
| MCM7 | Minichromosome maintenance complex component 7 [Source:HGNC Symbol;Acc:6950] | |
| MCM8 | Minichromosome maintenance complex component 8 [Source:HGNC Symbol;Acc:16147] | |

| | | |
|---------------|--|---|
| MCM9 | Minichromosome maintenance complex component 9 [Source:HGNC Symbol;Acc:21484] | |
| MCMBP | Minichromosome maintenance complex binding protein [Source:HGNC Symbol;Acc:25782] | |
| MCOLN1 | Mucolipin 1 [Source:HGNC Symbol;Acc:13356] | |
| MCPH1 | Microcephalin 1 [Source:HGNC Symbol;Acc:6954] | |
| MDFIC | Myod family inhibitor domain containing [Source:HGNC Symbol;Acc:28870] | |
| MDGA1 | MAM domain containing glycosylphosphatidylinositol anchor 1 [Source:HGNC Symbol;Acc:19267] | |
| MDH2 | Malate dehydrogenase 2, NAD (mitochondrial) [Source:HGNC Symbol;Acc:6971] | |
| MDM2 | Mdm2 p53 binding protein homolog (mouse) | √ |
| MDM4 | Mdm4 p53 binding protein homolog (mouse) | √ |
| MDN1 | MDN1, midasin homolog (yeast) [Source:HGNC Symbol;Acc:18302] | |
| ME2 | Malic enzyme 2, NAD(+)-dependent, mitochondrial [Source:HGNC Symbol;Acc:6984] | |
| ME3 | Malic enzyme 3, NADP(+)-dependent, mitochondrial [Source:HGNC Symbol;Acc:6985] | |
| MECOM | MDS1 and EVI1 complex locus [Source:HGNC Symbol;Acc:3498] | |
| MECP2 | Methyl cpg binding protein 2 (Rett syndrome) [Source:HGNC Symbol;Acc:6990] | |
| MECR | Mitochondrial trans-2-enoyl-coa reductase [Source:HGNC Symbol;Acc:19691] | |
| MED1 | Mediator complex subunit 1 [Source:HGNC Symbol;Acc:9234] | |
| MED12 | Mediator complex subunit 12 | √ |
| MED12L | Mediator complex subunit 12-like [Source:HGNC Symbol;Acc:16050] | |
| MED13 | Mediator complex subunit 13 [Source:HGNC Symbol;Acc:22474] | |
| MED13L | Mediator complex subunit 13-like [Source:HGNC Symbol;Acc:22962] | |
| MED14 | Mediator complex subunit 14 [Source:HGNC Symbol;Acc:2370] | |
| MED20 | Mediator complex subunit 20 [Source:HGNC Symbol;Acc:16840] | |
| MED23 | Mediator complex subunit 23 [Source:HGNC Symbol;Acc:2372] | |
| MED28 | Mediator complex subunit 28 [Source:HGNC Symbol;Acc:24628] | |

| | | |
|----------------|--|--|
| MED29 | Mediator complex subunit 29 [Source:HGNC Symbol;Acc:23074] | |
| MEF2C | Myocyte enhancer factor 2C [Source:HGNC Symbol;Acc:6996] | |
| MEF2D | Myocyte enhancer factor 2D [Source:HGNC Symbol;Acc:6997] | |
| MEGF10 | Multiple EGF-like-domains 10 [Source:HGNC Symbol;Acc:29634] | |
| MEGF6 | Multiple EGF-like-domains 6 [Source:HGNC Symbol;Acc:3232] | |
| MEGF8 | Multiple EGF-like-domains 8 [Source:HGNC Symbol;Acc:3233] | |
| MEGF9 | Multiple EGF-like-domains 9 [Source:HGNC Symbol;Acc:3234] | |
| MEI1 | Meiosis inhibitor 1 [Source:HGNC Symbol;Acc:28613] | |
| MEMO1 | Mediator of cell motility 1 [Source:HGNC Symbol;Acc:14014] | |
| MERTK | C-mer proto-oncogene tyrosine kinase [Source:HGNC Symbol;Acc:7027] | |
| MESDC1 | Mesoderm development candidate 1 [Source:HGNC Symbol;Acc:13519] | |
| MESDC2 | Mesoderm development candidate 2 [Source:HGNC Symbol;Acc:13520] | |
| METAP1 | Methionyl aminopeptidase 1 [Source:HGNC Symbol;Acc:15789] | |
| METRNL | Meteorin, glial cell differentiation regulator-like [Source:HGNC Symbol;Acc:27584] | |
| METT10D | Methyltransferase 10 domain containing [Source:HGNC Symbol;Acc:28484] | |
| METT5D1 | Methyltransferase 5 domain containing 1 [Source:HGNC Symbol;Acc:26606] | |
| METT12 | Methyltransferase like 12 [Source:HGNC Symbol;Acc:33113] | |
| METT4 | Methyltransferase like 4 [Source:HGNC Symbol;Acc:24726] | |
| METT7A | Methyltransferase like 7A [Source:HGNC Symbol;Acc:24550] | |
| METT7B | Methyltransferase like 7B [Source:HGNC Symbol;Acc:28276] | |
| METT8 | Methyltransferase like 8 [Source:HGNC Symbol;Acc:25856] | |
| METT9 | Methyltransferase like 9 [Source:HGNC Symbol;Acc:24586] | |
| MFAP3 | Microfibrillar-associated protein 3 [Source:HGNC Symbol;Acc:7034] | |
| MFAP3L | Microfibrillar-associated protein 3-like [Source:HGNC Symbol;Acc:29083] | |
| MFF | Mitochondrial fission factor [Source:HGNC Symbol;Acc:24858] | |
| MFGE8 | Milk fat globule-EGF factor 8 protein [Source:HGNC Symbol;Acc:7036] | |
| MFHAS1 | Malignant fibrous histiocytoma amplified sequence 1 [Source:HGNC Symbol;Acc:16982] | |
| MFI2 | Antigen p97 (melanoma associated) identified by monoclonal antibodies 133.2 and 96.5 [Source:HGNC Symbol;Acc:7037] | |
| MFN1 | Mitofusin 1 [Source:HGNC Symbol;Acc:18262] | |

| | | |
|---------------|--|---|
| MFN2 | Mitofusin 2 [Source:HGNC Symbol;Acc:16877] | |
| MFSD3 | Major facilitator superfamily domain containing 3 [Source:HGNC Symbol;Acc:25157] | |
| MFSD6 | Major facilitator superfamily domain containing 6 [Source:HGNC Symbol;Acc:24711] | |
| MFSD6L | Major facilitator superfamily domain containing 6-like [Source:HGNC Symbol;Acc:26656] | |
| MGA | MAX gene associated [Source:HGNC Symbol;Acc:14010] | |
| MGAT1 | Mannosyl (alpha-1,3-)-glycoprotein beta-1,2-N-acetylglucosaminyltransferase [Source:HGNC Symbol;Acc:7044] | |
| MGAT4A | Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase, isozyme A [Source:HGNC Symbol;Acc:7047] | |
| MGAT4C | Mannosyl (alpha-1,3-)-glycoprotein beta-1,4-N-acetylglucosaminyltransferase, isozyme C (putative) [Source:HGNC Symbol;Acc:30871] | |
| MGAT5 | Mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetyl-glucosaminyltransferase [Source:HGNC Symbol;Acc:7049] | |
| MGAT5B | Mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetyl-glucosaminyltransferase, isozyme B [Source:HGNC Symbol;Acc:24140] | |
| MGEA5 | Meningioma expressed antigen 5 (hyaluronidase) [Source:HGNC Symbol;Acc:7056] | |
| MGLL | Monoglyceride lipase [Source:HGNC Symbol;Acc:17038] | |
| MICB | MHC class I polypeptide-related sequence B [Source:HGNC Symbol;Acc:7091] | |
| MID1 | Midline 1 (Opitz/BBB syndrome) [Source:HGNC Symbol;Acc:7095] | |
| MID2 | Midline 2 [Source:HGNC Symbol;Acc:7096] | |
| MIER3 | Mesoderm induction early response 1, family member 3 [Source:HGNC Symbol;Acc:26678] | |
| MIF4GD | MIF4G domain containing [Source:HGNC Symbol;Acc:24030] | |
| MIS18A | MIS18 kinetochore protein homolog A (S. Pombe) [Source:HGNC Symbol;Acc:1286] | |
| MITF | Microphthalmia-associated transcription factor | √ |

| | | |
|---------------|---|---|
| MKI67 | Antigen identified by monoclonal antibody Ki-67 [Source:HGNC Symbol;Acc:7107] | |
| MKL1 | Megakaryoblastic leukemia (translocation) 1 | √ |
| MKL2 | MKL/myocardin-like 2 [Source:HGNC Symbol;Acc:29819] | |
| MKLN1 | Muskelin 1, intracellular mediator containing kelch motifs [Source:HGNC Symbol;Acc:7109] | |
| MKNK1 | MAP kinase interacting serine/threonine kinase 1 [Source:HGNC Symbol;Acc:7110] | |
| MKRN3 | Makorin ring finger protein 3 [Source:HGNC Symbol;Acc:7114] | |
| MLC1 | Megalencephalic leukoencephalopathy with subcortical cysts 1 [Source:HGNC Symbol;Acc:17082] | |
| MLF1 | Myeloid leukemia factor 1 | √ |
| MLF1IP | MLF1 interacting protein [Source:HGNC Symbol;Acc:21348] | |
| MLH1 | Mutl homolog 1, colon cancer, nonpolyposis type 2 (<i>E. Coli</i>) | √ |
| MLH3 | Mutl homolog 3 (<i>E. Coli</i>) [Source:HGNC Symbol;Acc:7128] | |
| MLL | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, <i>Drosophila</i>) | √ |
| MLL2 | Myeloid/lymphoid or mixed-lineage leukemia 2 [Source:HGNC Symbol;Acc:7133] | |
| MLL3 | Myeloid/lymphoid or mixed-lineage leukemia 3 | √ |
| MLL5 | Myeloid/lymphoid or mixed-lineage leukemia 5 (trithorax homolog, <i>Drosophila</i>) | |
| MLLT10 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, <i>Drosophila</i>); translocated to, 10 | √ |
| MLLT3 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, <i>Drosophila</i>); translocated to, 3 | √ |
| MLLT4 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, <i>Drosophila</i>); translocated to, 4 | √ |
| MLLT6 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, <i>Drosophila</i>); translocated to, 6 | √ |
| MLPH | Melanophilin [Source:HGNC Symbol;Acc:29643] | |
| MLST8 | MTOR associated protein, LST8 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:24825] | |
| MLX | MAX-like protein X [Source:HGNC Symbol;Acc:11645] | |

| | | |
|----------------|---|---|
| MLXIPL | MLX interacting protein-like [Source:HGNC Symbol;Acc:12744] | |
| MLYCD | Malonyl-coa decarboxylase [Source:HGNC Symbol;Acc:7150] | |
| MMAA | Methylmalonic aciduria (cobalamin deficiency) cbla type [Source:HGNC Symbol;Acc:18871] | |
| MMD2 | Monocyte to macrophage differentiation-associated 2 [Source:HGNC Symbol;Acc:30133] | |
| MME | Membrane metallo-endopeptidase [Source:HGNC Symbol;Acc:7154] | |
| MMP11 | Matrix metallopeptidase 11 (stromelysin 3) [Source:HGNC Symbol;Acc:7157] | |
| MMP13 | Matrix metallopeptidase 13 (collagenase 3) [Source:HGNC Symbol;Acc:7159] | |
| MMP14 | Matrix metallopeptidase 14 (membrane-inserted) [Source:HGNC Symbol;Acc:7160] | |
| MMP16 | Matrix metallopeptidase 16 (membrane-inserted) [Source:HGNC Symbol;Acc:7162] | |
| MMP17 | Matrix metallopeptidase 17 (membrane-inserted) [Source:HGNC Symbol;Acc:7163] | |
| MMP24 | Matrix metallopeptidase 24 (membrane-inserted) [Source:HGNC Symbol;Acc:7172] | |
| MMP27 | Matrix metallopeptidase 27 [Source:HGNC Symbol;Acc:14250] | |
| MMP28 | Matrix metallopeptidase 28 [Source:HGNC Symbol;Acc:14366] | |
| MMRN2 | Multimerin 2 [Source:HGNC Symbol;Acc:19888] | |
| MMS19 | MMS19 nucleotide excision repair homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:13824] | |
| MN1 | Meningioma (disrupted in balanced translocation) 1 | √ |
| MOBKL1B | MOB1, Mps One Binder kinase activator-like 1B (yeast) [Source:HGNC Symbol;Acc:16015] | |
| MOBKL2C | MOB1, Mps One Binder kinase activator-like 2C (yeast) [Source:HGNC Symbol;Acc:29800] | |
| MOCOS | Molybdenum cofactor sulfurase [Source:HGNC Symbol;Acc:18234] | |
| MOCS2 | Molybdenum cofactor synthesis 2 [Source:HGNC Symbol;Acc:7193] | |
| MOCS3 | Molybdenum cofactor synthesis 3 [Source:HGNC Symbol;Acc:15765] | |
| MOGAT1 | Monoacylglycerol O-acyltransferase 1 [Source:HGNC Symbol;Acc:18210] | |

| | | |
|-----------------|--|--|
| MOGS | Mannosyl-oligosaccharide glucosidase [Source:HGNC Symbol;Acc:24862] | |
| MON1A | MON1 homolog A (yeast) [Source:HGNC Symbol;Acc:28207] | |
| MON2 | MON2 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:29177] | |
| MORC2 | MORC family CW-type zinc finger 2 [Source:HGNC Symbol;Acc:23573] | |
| MORC3 | MORC family CW-type zinc finger 3 [Source:HGNC Symbol;Acc:23572] | |
| MORC4 | MORC family CW-type zinc finger 4 [Source:HGNC Symbol;Acc:23485] | |
| MORF4L1 | Mortality factor 4 like 1 [Source:HGNC Symbol;Acc:16989] | |
| MOSC2 | MOCO sulphurase C-terminal domain containing 2 [Source:HGNC Symbol;Acc:26064] | |
| MOSPD1 | Motile sperm domain containing 1 [Source:HGNC Symbol;Acc:25235] | |
| MOV10 | Mov10, Moloney leukemia virus 10, homolog (mouse) [Source:HGNC Symbol;Acc:7200] | |
| MOV10L1 | Mov10l1, Moloney leukemia virus 10-like 1, homolog (mouse) [Source:HGNC Symbol;Acc:7201] | |
| MOXD1 | Monooxygenase, DBH-like 1 [Source:HGNC Symbol;Acc:21063] | |
| MPDZ | Multiple PDZ domain protein [Source:HGNC Symbol;Acc:7208] | |
| MPEG1 | Macrophage expressed 1 [Source:HGNC Symbol;Acc:29619] | |
| MPG | N-methylpurine-DNA glycosylase [Source:HGNC Symbol;Acc:7211] | |
| MPHOSPH6 | M-phase phosphoprotein 6 [Source:HGNC Symbol;Acc:7214] | |
| MPO | Myeloperoxidase [Source:HGNC Symbol;Acc:7218] | |
| MPP3 | Membrane protein, palmitoylated 3 (MAGUK p55 subfamily member 3) [Source:HGNC Symbol;Acc:7221] | |
| MPPED2 | Metallophosphoesterase domain containing 2 [Source:HGNC Symbol;Acc:1180] | |
| MPRIP | Myosin phosphatase Rho interacting protein [Source:HGNC Symbol;Acc:30321] | |
| MPST | Mercaptopyruvate sulfurtransferase [Source:HGNC Symbol;Acc:7223] | |
| MR1 | Major histocompatibility complex, class I-related [Source:HGNC Symbol;Acc:4975] | |
| MRAP2 | Melanocortin 2 receptor accessory protein 2 [Source:HGNC Symbol;Acc:21232] | |
| MRC1 | Mannose receptor, C type 1 [Source:HGNC Symbol;Acc:7228] | |
| MRC1L1 | Mannose receptor, C type 1-like 1 [Source:HGNC Symbol;Acc:23403] | |

| | | |
|----------------|---|---|
| MRE11A | MRE11 meiotic recombination 11 homolog A (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:7230] | |
| MREG | Melanoregulin [Source:HGNC Symbol;Acc:25478] | |
| MRGPRX3 | MAS-related GPR, member X3 [Source:HGNC Symbol;Acc:17980] | |
| MRGPRX4 | MAS-related GPR, member X4 [Source:HGNC Symbol;Acc:17617] | |
| MRO | Maestro [Source:HGNC Symbol;Acc:24121] | |
| MRPL13 | Mitochondrial ribosomal protein L13 [Source:HGNC Symbol;Acc:14278] | |
| MRPL14 | Mitochondrial ribosomal protein L14 [Source:HGNC Symbol;Acc:14279] | |
| MRPL28 | Mitochondrial ribosomal protein L28 [Source:HGNC Symbol;Acc:14484] | |
| MRPL30 | Mitochondrial ribosomal protein L30 [Source:HGNC Symbol;Acc:14036] | |
| MRPL32 | Mitochondrial ribosomal protein L32 [Source:HGNC Symbol;Acc:14035] | |
| MRPL35 | Mitochondrial ribosomal protein L35 [Source:HGNC Symbol;Acc:14489] | |
| MRPL38 | Mitochondrial ribosomal protein L38 [Source:HGNC Symbol;Acc:14033] | |
| MRPL43 | Mitochondrial ribosomal protein L43 [Source:HGNC Symbol;Acc:14517] | |
| MRPL50 | Mitochondrial ribosomal protein L50 [Source:HGNC Symbol;Acc:16654] | |
| MRPL55 | Mitochondrial ribosomal protein L55 [Source:HGNC Symbol;Acc:16686] | |
| MRPS23 | Mitochondrial ribosomal protein S23 [Source:HGNC Symbol;Acc:14509] | |
| MRPS24 | Mitochondrial ribosomal protein S24 [Source:HGNC Symbol;Acc:14510] | |
| MRPS27 | Mitochondrial ribosomal protein S27 [Source:HGNC Symbol;Acc:14512] | |
| MRPS5 | Mitochondrial ribosomal protein S5 [Source:HGNC Symbol;Acc:14498] | |
| MRVII | Murine retrovirus integration site 1 homolog [Source:HGNC Symbol;Acc:7237] | |
| MS4A14 | Membrane-spanning 4-domains, subfamily A, member 14 [Source:HGNC Symbol;Acc:30706] | |
| MS4A5 | Membrane-spanning 4-domains, subfamily A, member 5 [Source:HGNC Symbol;Acc:13374] | |
| MS4A6A | Membrane-spanning 4-domains, subfamily A, member 6A [Source:HGNC Symbol;Acc:13375] | |
| MSH6 | Muts homolog 6 (<i>E. Coli</i>) | √ |
| MSI2 | Musashi homolog 2 (<i>Drosophila</i>) | √ |
| MSL1 | Male-specific lethal 1 homolog (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:27905] | |

| | | |
|----------------|---|---|
| MSL2 | Male-specific lethal 2 homolog (Drosophila) [Source:HGNC Symbol;Acc:25544] | |
| MSL3 | Male-specific lethal 3 homolog (Drosophila) [Source:HGNC Symbol;Acc:7370] | |
| MSLNL | Mesothelin-like [Source:HGNC Symbol;Acc:14170] | |
| MSMB | Microseminoprotein, beta- [Source:HGNC Symbol;Acc:7372] | |
| MSN | Moesin | √ |
| MST1R | Macrophage stimulating 1 receptor (c-met-related tyrosine kinase) [Source:HGNC Symbol;Acc:7381] | |
| MT1E | Metallothionein 1E [Source:HGNC Symbol;Acc:7397] | |
| MTAP | Methylthioadenosine phosphorylase [Source:HGNC Symbol;Acc:7413] | |
| MTBP | Mdm2, transformed 3T3 cell double minute 2, p53 binding protein (mouse) binding protein, 104kda [Source:HGNC Symbol;Acc:7417] | |
| MTDH | Metadherin [Source:HGNC Symbol;Acc:29608] | |
| MTERFD2 | MTERF domain containing 2 [Source:HGNC Symbol;Acc:28785] | |
| MTERFD3 | MTERF domain containing 3 [Source:HGNC Symbol;Acc:30779] | |
| MTF1 | Metal-regulatory transcription factor 1 [Source:HGNC Symbol;Acc:7428] | |
| MTF2 | Metal response element binding transcription factor 2 [Source:HGNC Symbol;Acc:29535] | |
| MTFR1 | Mitochondrial fission regulator 1 [Source:HGNC Symbol;Acc:29510] | |
| MTHFD1 | Methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1, methenyltetrahydrofolate cyclohydrolase, formyltetrahydrofolate synthetase [Source:HGNC Symbol;Acc:7432] | |
| MTHFSD | Methenyltetrahydrofolate synthetase domain containing [Source:HGNC Symbol;Acc:25778] | |
| MTL5 | Metallothionein-like 5, testis-specific (tesmin) [Source:HGNC Symbol;Acc:7446] | |
| MTMR10 | Myotubularin related protein 10 [Source:HGNC Symbol;Acc:25999] | |
| MTMR12 | Myotubularin related protein 12 [Source:HGNC Symbol;Acc:18191] | |
| MTMR2 | Myotubularin related protein 2 [Source:HGNC Symbol;Acc:7450] | |
| MTMR3 | Myotubularin related protein 3 [Source:HGNC Symbol;Acc:7451] | |
| MTMR4 | Myotubularin related protein 4 [Source:HGNC Symbol;Acc:7452] | |
| MTMR8 | Myotubularin related protein 8 [Source:HGNC Symbol;Acc:16825] | |

| | | |
|---------------|---|--|
| MTMR9 | Myotubularin related protein 9 [Source:HGNC Symbol;Acc:14596] | |
| MTNR1A | Melatonin receptor 1A [Source:HGNC Symbol;Acc:7463] | |
| MTO1 | Mitochondrial translation optimization 1 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:19261] | |
| MTOR | Mechanistic target of rapamycin (serine/threonine kinase) [Source:HGNC Symbol;Acc:3942] | |
| MTPAP | Mitochondrial poly(A) polymerase [Source:HGNC Symbol;Acc:25532] | |
| MTPN | Myotrophin [Source:HGNC Symbol;Acc:15667] | |
| MTR | 5-methyltetrahydrofolate-homocysteine methyltransferase [Source:HGNC Symbol;Acc:7468] | |
| MTUS1 | Microtubule associated tumor suppressor 1 [Source:HGNC Symbol;Acc:29789] | |
| MTUS2 | Microtubule associated tumor suppressor candidate 2 [Source:HGNC Symbol;Acc:20595] | |
| MUC12 | Mucin 12, cell surface associated [Source:HGNC Symbol;Acc:7510] | |
| MUC2 | Mucin 2, oligomeric mucus/gel-forming [Source:HGNC Symbol;Acc:7512] | |
| MUC4 | Mucin 4, cell surface associated [Source:HGNC Symbol;Acc:7514] | |
| MUC5AC | Mucin 5AC, oligomeric mucus/gel-forming [Source:HGNC Symbol;Acc:7515] | |
| MUC5B | Mucin 5B, oligomeric mucus/gel-forming [Source:HGNC Symbol;Acc:7516] | |
| MUC6 | Mucin 6, oligomeric mucus/gel-forming [Source:HGNC Symbol;Acc:7517] | |
| MUL1 | Mitochondrial E3 ubiquitin protein ligase 1 [Source:HGNC Symbol;Acc:25762] | |
| MUM1 | Melanoma associated antigen (mutated) 1 [Source:HGNC Symbol;Acc:29641] | |
| MURC | Muscle-related coiled-coil protein [Source:HGNC Symbol;Acc:33742] | |
| MUT | Methylmalonyl coa mutase [Source:HGNC Symbol;Acc:7526] | |
| MUTED | Muted homolog (mouse) [Source:HGNC Symbol;Acc:18561] | |
| MX2 | Myxovirus (influenza virus) resistance 2 (mouse) [Source:HGNC Symbol;Acc:7533] | |
| MXI1 | MAX interactor 1 [Source:HGNC Symbol;Acc:7534] | |
| MXRA5 | Matrix-remodelling associated 5 [Source:HGNC Symbol;Acc:7539] | |
| MYBPC2 | Myosin binding protein C, fast type [Source:HGNC Symbol;Acc:7550] | |

| | | |
|---------------|---|---|
| MYBPC3 | Myosin binding protein C, cardiac [Source:HGNC Symbol;Acc:7551] | |
| MYBPHL | Myosin binding protein H-like [Source:HGNC Symbol;Acc:30434] | |
| MYCBP2 | MYC binding protein 2 [Source:HGNC Symbol;Acc:23386] | |
| MYCL1 | V-myc myelocytomatosis viral oncogene homolog 1, lung carcinoma derived (avian) [Source:HGNC Symbol;Acc:7555] | |
| MYD88 | Myeloid differentiation primary response gene (88) | √ |
| MYF6 | Myogenic factor 6 (herculin) [Source:HGNC Symbol;Acc:7566] | |
| MYH1 | Myosin, heavy chain 1, skeletal muscle, adult [Source:HGNC Symbol;Acc:7567] | |
| MYH10 | Myosin, heavy chain 10, non-muscle [Source:HGNC Symbol;Acc:7568] | |
| MYH11 | Myosin, heavy chain 11, smooth muscle | √ |
| MYH15 | Myosin, heavy chain 15 [Source:HGNC Symbol;Acc:31073] | |
| MYH2 | Myosin, heavy chain 2, skeletal muscle, adult [Source:HGNC Symbol;Acc:7572] | |
| MYH3 | Myosin, heavy chain 3, skeletal muscle, embryonic [Source:HGNC Symbol;Acc:7573] | |
| MYH4 | Myosin, heavy chain 4, skeletal muscle [Source:HGNC Symbol;Acc:7574] | |
| MYH7 | Myosin, heavy chain 7, cardiac muscle, beta [Source:HGNC Symbol;Acc:7577] | |
| MYH8 | Myosin, heavy chain 8, skeletal muscle, perinatal [Source:HGNC Symbol;Acc:7578] | |
| MYL3 | Myosin, light chain 3, alkali; ventricular, skeletal, slow [Source:HGNC Symbol;Acc:7584] | |
| MYL6 | Myosin, light chain 6, alkali, smooth muscle and non-muscle [Source:HGNC Symbol;Acc:7587] | |
| MYLIP | Myosin regulatory light chain interacting protein [Source:HGNC Symbol;Acc:21155] | |
| MYLK | Myosin light chain kinase [Source:HGNC Symbol;Acc:7590] | |
| MYLK3 | Myosin light chain kinase 3 [Source:HGNC Symbol;Acc:29826] | |
| MYLK4 | Myosin light chain kinase family, member 4 [Source:HGNC Symbol;Acc:27972] | |
| MYNN | Myoneurin [Source:HGNC Symbol;Acc:14955] | |
| MYO15A | Myosin XVA [Source:HGNC Symbol;Acc:7594] | |

| | | |
|---------------|---|---|
| MYO15B | Myosin XVB pseudogene [Source:HGNC Symbol;Acc:14083] | |
| MYO16 | Myosin XVI [Source:HGNC Symbol;Acc:29822] | |
| MYO18A | Myosin XVIII A [Source:HGNC Symbol;Acc:31104] | |
| MYO19 | Myosin XIX [Source:HGNC Symbol;Acc:26234] | |
| MYO1A | Myosin IA [Source:HGNC Symbol;Acc:7595] | |
| MYO3A | Myosin IIIA [Source:HGNC Symbol;Acc:7601] | |
| MYO5A | Myosin VA (heavy chain 12, myoxin) [Source:HGNC Symbol;Acc:7602] | |
| MYO5B | Myosin VB [Source:HGNC Symbol;Acc:7603] | |
| MYO5C | Myosin VC [Source:HGNC Symbol;Acc:7604] | |
| MYO9A | Myosin IXA [Source:HGNC Symbol;Acc:7608] | |
| MYOC | Myocilin, trabecular meshwork inducible glucocorticoid response [Source:HGNC Symbol;Acc:7610] | |
| MYOCD | Myocardin [Source:HGNC Symbol;Acc:16067] | |
| MYOF | Myoferlin [Source:HGNC Symbol;Acc:3656] | |
| MYOM1 | Myomesin 1, 185kda [Source:HGNC Symbol;Acc:7613] | |
| MYOT | Myotilin [Source:HGNC Symbol;Acc:12399] | |
| MYOZ3 | Myozenin 3 [Source:HGNC Symbol;Acc:18565] | |
| MYPN | Myopalladin [Source:HGNC Symbol;Acc:23246] | |
| MYRIP | Myosin VIIA and Rab interacting protein [Source:HGNC Symbol;Acc:19156] | |
| MYST3 | MYST histone acetyltransferase (monocytic leukemia) 3 [Source:HGNC Symbol;Acc:13013] | |
| MYST4 | MYST histone acetyltransferase (monocytic leukemia) 4 | √ |
| MYT1 | Myelin transcription factor 1 [Source:HGNC Symbol;Acc:7622] | |
| MYT1L | Myelin transcription factor 1-like [Source:HGNC Symbol;Acc:7623] | |
| MZT1 | Mitotic spindle organizing protein 1 [Source:HGNC Symbol;Acc:33830] | |
| N4BP2 | NEDD4 binding protein 2 [Source:HGNC Symbol;Acc:29851] | |
| NAA16 | N(alpha)-acetyltransferase 16, nata auxiliary subunit [Source:HGNC Symbol;Acc:26164] | |
| NAA25 | N(alpha)-acetyltransferase 25, natb auxiliary subunit [Source:HGNC Symbol;Acc:25783] | |
| NAA30 | N(alpha)-acetyltransferase 30, natc catalytic subunit [Source:HGNC Symbol;Acc:19844] | |

| | | |
|-----------------|--|---|
| NAA40 | N(alpha)-acetyltransferase 40, natd catalytic subunit, homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:25845] | |
| NAA50 | N(alpha)-acetyltransferase 50, nate catalytic subunit [Source:HGNC Symbol;Acc:29533] | |
| NAAA | N-acylethanolamine acid amidase [Source:HGNC Symbol;Acc:736] | |
| NAALAD2 | N-acetylated alpha-linked acidic dipeptidase 2 [Source:HGNC Symbol;Acc:14526] | |
| NAALADL1 | N-acetylated alpha-linked acidic dipeptidase-like 1 [Source:HGNC Symbol;Acc:23536] | |
| NACA | Nascent polypeptide-associated complex alpha subunit | √ |
| NACC1 | Nucleus accumbens associated 1, BEN and BTB (POZ) domain containing [Source:HGNC Symbol;Acc:20967] | |
| NADK | NAD kinase [Source:HGNC Symbol;Acc:29831] | |
| NADSYN1 | NAD synthetase 1 [Source:HGNC Symbol;Acc:29832] | |
| NAGK | N-acetylglucosamine kinase [Source:HGNC Symbol;Acc:17174] | |
| NAGLU | N-acetylglucosaminidase, alpha [Source:HGNC Symbol;Acc:7632] | |
| NAGPA | N-acetylglucosamine-1-phosphodiester alpha-N-acetylglucosaminidase [Source:HGNC Symbol;Acc:17378] | |
| NAIF1 | Nuclear apoptosis inducing factor 1 [Source:HGNC Symbol;Acc:25446] | |
| NAIP | NLR family, apoptosis inhibitory protein [Source:HGNC Symbol;Acc:7634] | |
| NALCN | Sodium leak channel, non-selective [Source:HGNC Symbol;Acc:19082] | |
| NAMPT | Nicotinamide phosphoribosyltransferase [Source:HGNC Symbol;Acc:30092] | |
| NANP | N-acetylneuraminic acid phosphatase [Source:HGNC Symbol;Acc:16140] | |
| NANS | N-acetylneuraminic acid synthase [Source:HGNC Symbol;Acc:19237] | |
| NAP1L4 | Nucleosome assembly protein 1-like 4 [Source:HGNC Symbol;Acc:7640] | |
| NAP1L5 | Nucleosome assembly protein 1-like 5 [Source:HGNC Symbol;Acc:19968] | |
| NAPRT1 | Nicotinate phosphoribosyltransferase domain containing 1 [Source:HGNC Symbol;Acc:30450] | |
| NARF | Nuclear prelamin A recognition factor [Source:HGNC Symbol;Acc:29916] | |
| NARFL | Nuclear prelamin A recognition factor-like [Source:HGNC Symbol;Acc:14179] | |
| NARG2 | NMDA receptor regulated 2 [Source:HGNC Symbol;Acc:29885] | |

| | | |
|---------------|--|--|
| NARS | Asparaginyl-trna synthetase [Source:HGNC Symbol;Acc:7643] | |
| NARS2 | Asparaginyl-trna synthetase 2, mitochondrial (putative) [Source:HGNC Symbol;Acc:26274] | |
| NASP | Nuclear autoantigenic sperm protein (histone-binding) [Source:HGNC Symbol;Acc:7644] | |
| NAT1 | N-acetyltransferase 1 (arylamine N-acetyltransferase) [Source:HGNC Symbol;Acc:7645] | |
| NAT10 | N-acetyltransferase 10 (GCN5-related) [Source:HGNC Symbol;Acc:29830] | |
| NAT8L | N-acetyltransferase 8-like (GCN5-related, putative) [Source:HGNC Symbol;Acc:26742] | |
| NAV2 | Neuron navigator 2 [Source:HGNC Symbol;Acc:15997] | |
| NBAS | Neuroblastoma amplified sequence [Source:HGNC Symbol;Acc:15625] | |
| NBEA | Neurobeachin [Source:HGNC Symbol;Acc:7648] | |
| NBEAL1 | Neurobeachin-like 1 [Source:HGNC Symbol;Acc:20681] | |
| NBEAL2 | Neurobeachin-like 2 [Source:HGNC Symbol;Acc:31928] | |
| NBL1 | Neuroblastoma, suppression of tumorigenicity 1 [Source:HGNC Symbol;Acc:7650] | |
| NBPF10 | Neuroblastoma breakpoint family, member 10 [Source:HGNC Symbol;Acc:31992] | |
| NBPF11 | Neuroblastoma breakpoint family, member 11 [Source:HGNC Symbol;Acc:31993] | |
| NBPF12 | Neuroblastoma breakpoint family, member 12 [Source:HGNC Symbol;Acc:31994] | |
| NBPF14 | Neuroblastoma breakpoint family, member 14 [Source:HGNC Symbol;Acc:25232] | |
| NBPF15 | Neuroblastoma breakpoint family, member 15 [Source:HGNC Symbol;Acc:28791] | |
| NBPF16 | Neuroblastoma breakpoint family, member 16 [Source:HGNC Symbol;Acc:31996] | |
| NBPF20 | Neuroblastoma breakpoint family, member 20 [Source:HGNC Symbol;Acc:32000] | |

| | | |
|----------------|---|---|
| NBPF24 | Neuroblastoma breakpoint family, member 24 [Source:HGNC Symbol;Acc:27299] | |
| NBPF3 | Neuroblastoma breakpoint family, member 3 [Source:HGNC Symbol;Acc:25076] | |
| NBPF4 | Neuroblastoma breakpoint family, member 4 [Source:HGNC Symbol;Acc:26550] | |
| NBPF6 | Neuroblastoma breakpoint family, member 6 [Source:HGNC Symbol;Acc:31988] | |
| NBPF9 | Neuroblastoma breakpoint family, member 9 [Source:HGNC Symbol;Acc:31991] | |
| NBR1 | Neighbor of BRCA1 gene 1 [Source:HGNC Symbol;Acc:6746] | |
| NCALD | Neurocalcin delta [Source:HGNC Symbol;Acc:7655] | |
| NCAM2 | Neural cell adhesion molecule 2 [Source:HGNC Symbol;Acc:7657] | |
| NCAN | Neurocan [Source:HGNC Symbol;Acc:2465] | |
| NCAPG | Non-SMC condensin I complex, subunit G [Source:HGNC Symbol;Acc:24304] | |
| NCAPG2 | Non-SMC condensin II complex, subunit G2 [Source:HGNC Symbol;Acc:21904] | |
| NCAPH | Non-SMC condensin I complex, subunit H [Source:HGNC Symbol;Acc:1112] | |
| NCBP2 | Nuclear cap binding protein subunit 2, 20kda [Source:HGNC Symbol;Acc:7659] | |
| NCCR1 | Non-specific cytotoxic cell receptor protein 1 homolog (zebrafish) [Source:HGNC Symbol;Acc:33739] | |
| NCF2 | Neutrophil cytosolic factor 2 [Source:HGNC Symbol;Acc:7661] | |
| NCK1 | NCK adaptor protein 1 [Source:HGNC Symbol;Acc:7664] | |
| NCKAP1L | NCK-associated protein 1-like [Source:HGNC Symbol;Acc:4862] | |
| NCKAP5 | NCK-associated protein 5 [Source:HGNC Symbol;Acc:29847] | |
| NCKIPSD | NCK interacting protein with SH3 domain [Source:HGNC Symbol;Acc:15486] | |
| NCLN | Nicalin [Source:HGNC Symbol;Acc:26923] | |
| NCOA1 | Nuclear receptor coactivator 1 | √ |
| NCOA3 | Nuclear receptor coactivator 3 [Source:HGNC Symbol;Acc:7670] | |

| | | |
|----------------|--|---|
| NCOA5 | Nuclear receptor coactivator 5 [Source:HGNC Symbol;Acc:15909] | |
| NCOA6 | Nuclear receptor coactivator 6 [Source:HGNC Symbol;Acc:15936] | |
| NCOR1 | Nuclear receptor corepressor 1 [Source:HGNC Symbol;Acc:7672] | |
| NCOR2 | Nuclear receptor corepressor 2 [Source:HGNC Symbol;Acc:7673] | |
| NCS1 | Neuronal calcium sensor 1 [Source:HGNC Symbol;Acc:3953] | |
| NCSTN | Nicastrin [Source:HGNC Symbol;Acc:17091] | |
| NDC80 | NDC80 homolog, kinetochore complex component (S. Cerevisiae) [Source:HGNC Symbol;Acc:16909] | |
| NDEL1 | Nude nuclear distribution gene E homolog (A. Nidulans)-like 1 [Source:HGNC Symbol;Acc:17620] | |
| NDFIP1 | Nedd4 family interacting protein 1 [Source:HGNC Symbol;Acc:17592] | |
| NDFIP2 | Nedd4 family interacting protein 2 [Source:HGNC Symbol;Acc:18537] | |
| NDRG1 | N-myc downstream regulated 1 | √ |
| NDRG4 | NDRG family member 4 [Source:HGNC Symbol;Acc:14466] | |
| NDST2 | N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 2 [Source:HGNC Symbol;Acc:7681] | |
| NDST3 | N-deacetylase/N-sulfotransferase (heparan glucosaminyl) 3 [Source:HGNC Symbol;Acc:7682] | |
| NDUFA10 | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 10, 42kda [Source:HGNC Symbol;Acc:7684] | |
| NDUFA3 | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 3, 9kda [Source:HGNC Symbol;Acc:7686] | |
| NDUFAF3 | NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, assembly factor 3 [Source:HGNC Symbol;Acc:29918] | |
| NDUFB10 | NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10, 22kda [Source:HGNC Symbol;Acc:7696] | |
| NDUFB5 | NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5, 16kda [Source:HGNC Symbol;Acc:7700] | |
| NDUFB9 | NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 9, 22kda [Source:HGNC Symbol;Acc:7704] | |
| NDUFC2 | NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 2, 14.5kda [Source:HGNC Symbol;Acc:7706] | |

| | | |
|---------------|---|--|
| NDUFS2 | NADH dehydrogenase (ubiquinone) Fe-S protein 2, 49kda (NADH-coenzyme Q reductase) [Source:HGNC Symbol;Acc:7708] | |
| NDUFS5 | NADH dehydrogenase (ubiquinone) Fe-S protein 5, 15kda (NADH-coenzyme Q reductase) [Source:HGNC Symbol;Acc:7712] | |
| NDUFV1 | NADH dehydrogenase (ubiquinone) flavoprotein 1, 51kda [Source:HGNC Symbol;Acc:7716] | |
| NDUFV2 | NADH dehydrogenase (ubiquinone) flavoprotein 2, 24kda [Source:HGNC Symbol;Acc:7717] | |
| NEB | Nebulin [Source:HGNC Symbol;Acc:7720] | |
| NEBL | Nebulette [Source:HGNC Symbol;Acc:16932] | |
| NECAP1 | NECAP endocytosis associated 1 [Source:HGNC Symbol;Acc:24539] | |
| NECAP2 | NECAP endocytosis associated 2 [Source:HGNC Symbol;Acc:25528] | |
| NEDD1 | Neural precursor cell expressed, developmentally down-regulated 1 [Source:HGNC Symbol;Acc:7723] | |
| NEDD4 | Neural precursor cell expressed, developmentally down-regulated 4 [Source:HGNC Symbol;Acc:7727] | |
| NEDD4L | Neural precursor cell expressed, developmentally down-regulated 4-like [Source:HGNC Symbol;Acc:7728] | |
| NEDD8 | Neural precursor cell expressed, developmentally down-regulated 8 [Source:HGNC Symbol;Acc:7732] | |
| NEFH | Neurofilament, heavy polypeptide [Source:HGNC Symbol;Acc:7737] | |
| NEK11 | NIMA (never in mitosis gene a)- related kinase 11 [Source:HGNC Symbol;Acc:18593] | |
| NEK6 | NIMA (never in mitosis gene a)-related kinase 6 [Source:HGNC Symbol;Acc:7749] | |
| NEK8 | NIMA (never in mitosis gene a)- related kinase 8 [Source:HGNC Symbol;Acc:13387] | |
| NEK9 | NIMA (never in mitosis gene a)- related kinase 9 [Source:HGNC Symbol;Acc:18591] | |
| NELL1 | NEL-like 1 (chicken) [Source:HGNC Symbol;Acc:7750] | |
| NELL2 | NEL-like 2 (chicken) [Source:HGNC Symbol;Acc:7751] | |
| NEO1 | Neogenin 1 [Source:HGNC Symbol;Acc:7754] | |
| NET1 | Neuroepithelial cell transforming 1 [Source:HGNC Symbol;Acc:14592] | |

| | | |
|----------------|---|---|
| NETO1 | Neuropilin (NRP) and tolloid (TLL)-like 1 [Source:HGNC Symbol;Acc:13823] | |
| NEU1 | Sialidase 1 (lysosomal sialidase) [Source:HGNC Symbol;Acc:7758] | |
| NEU3 | Sialidase 3 (membrane sialidase) [Source:HGNC Symbol;Acc:7760] | |
| NEUROD4 | Neurogenic differentiation 4 [Source:HGNC Symbol;Acc:13802] | |
| NEXN | Nexilin (F actin binding protein) [Source:HGNC Symbol;Acc:29557] | |
| NF1 | Neurofibromin 1 | √ |
| NF2 | Neurofibromin 2 (merlin) | √ |
| NFAT5 | Nuclear factor of activated T-cells 5, tonicity-responsive [Source:HGNC Symbol;Acc:7774] | |
| NFATC1 | Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 1 [Source:HGNC Symbol;Acc:7775] | |
| NFATC2 | Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2 [Source:HGNC Symbol;Acc:7776] | |
| NFATC4 | Nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 4 [Source:HGNC Symbol;Acc:7778] | |
| NFIA | Nuclear factor I/A [Source:HGNC Symbol;Acc:7784] | |
| NFKBIA | Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, alpha [Source:HGNC Symbol;Acc:7797] | |
| NFRKB | Nuclear factor related to kappa binding protein [Source:HGNC Symbol;Acc:7802] | |
| NFX1 | Nuclear transcription factor, X-box binding 1 [Source:HGNC Symbol;Acc:7803] | |
| NFYA | Nuclear transcription factor Y, alpha [Source:HGNC Symbol;Acc:7804] | |
| NGB | Neuroglobin [Source:HGNC Symbol;Acc:14077] | |
| NGEF | Neuronal guanine nucleotide exchange factor [Source:HGNC Symbol;Acc:7807] | |
| NGLY1 | N-glycanase 1 [Source:HGNC Symbol;Acc:17646] | |
| NHLH1 | Nescient helix loop helix 1 [Source:HGNC Symbol;Acc:7817] | |
| NHLH2 | Nescient helix loop helix 2 [Source:HGNC Symbol;Acc:7818] | |
| NHLRC2 | NHL repeat containing 2 [Source:HGNC Symbol;Acc:24731] | |
| NHP2L1 | NHP2 non-histone chromosome protein 2-like 1 (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:7819] | |

| | | |
|----------------|--|---|
| NHS | Nance-Horan syndrome (congenital cataracts and dental anomalies) [Source:HGNC Symbol;Acc:7820] | |
| NHSL1 | NHS-like 1 [Source:HGNC Symbol;Acc:21021] | |
| NHSL2 | NHS-like 2 [Source:HGNC Symbol;Acc:33737] | |
| NID1 | Nidogen 1 [Source:HGNC Symbol;Acc:7821] | |
| NIF3L1 | NIF3 NGG1 interacting factor 3-like 1 (S. Pombe) [Source:HGNC Symbol;Acc:13390] | |
| NIN | Ninein (GSK3B interacting protein) | √ |
| NINJ2 | Ninjurin 2 [Source:HGNC Symbol;Acc:7825] | |
| NINL | Ninein-like [Source:HGNC Symbol;Acc:29163] | |
| NIPA1 | Non imprinted in Prader-Willi/Angelman syndrome 1 [Source:HGNC Symbol;Acc:17043] | |
| NIPAL1 | NIPA-like domain containing 1 [Source:HGNC Symbol;Acc:27194] | |
| NIPBL | Nipped-B homolog (Drosophila) [Source:HGNC Symbol;Acc:28862] | |
| NISCH | Nischarin [Source:HGNC Symbol;Acc:18006] | |
| NKAIN2 | Na+/K+ transporting atpase interacting 2 [Source:HGNC Symbol;Acc:16443] | |
| NKAP | NFKB activating protein [Source:HGNC Symbol;Acc:29873] | |
| NKIRAS1 | NFKB inhibitor interacting Ras-like 1 [Source:HGNC Symbol;Acc:17899] | |
| NKPD1 | Ntpase, KAP family P-loop domain containing 1 [Source:HGNC Symbol;Acc:24739] | |
| NLE1 | Notchless homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:19889] | |
| NLGN1 | Neuroigin 1 [Source:HGNC Symbol;Acc:14291] | |
| NLGN3 | Neuroigin 3 [Source:HGNC Symbol;Acc:14289] | |
| NLGN4X | Neuroigin 4, X-linked [Source:HGNC Symbol;Acc:14287] | |
| NLGN4Y | Neuroigin 4, Y-linked [Source:HGNC Symbol;Acc:15529] | |
| NLN | Neurolysin (metallopeptidase M3 family) [Source:HGNC Symbol;Acc:16058] | |
| NLRC3 | NLR family, CARD domain containing 3 [Source:HGNC Symbol;Acc:29889] | |
| NLRC5 | NLR family, CARD domain containing 5 [Source:HGNC Symbol;Acc:29933] | |
| NLRP2 | NLR family, pyrin domain containing 2 [Source:HGNC Symbol;Acc:22948] | |

| | | |
|----------------|---|---|
| NLRP3 | NLR family, pyrin domain containing 3 [Source:HGNC Symbol;Acc:16400] | |
| NMB | Neuromedin B [Source:HGNC Symbol;Acc:7842] | |
| NMBR | Neuromedin B receptor [Source:HGNC Symbol;Acc:7843] | |
| NME6 | Non-metastatic cells 6, protein expressed in (nucleoside-diphosphate kinase) [Source:HGNC Symbol;Acc:20567] | |
| NMNAT3 | Nicotinamide nucleotide adenylyltransferase 3 [Source:HGNC Symbol;Acc:20989] | |
| NMT2 | N-myristoyltransferase 2 [Source:HGNC Symbol;Acc:7858] | |
| NMUR1 | Neuromedin U receptor 1 [Source:HGNC Symbol;Acc:4518] | |
| NNMT | Nicotinamide N-methyltransferase [Source:HGNC Symbol;Acc:7861] | |
| NOB1 | NIN1/RPN12 binding protein 1 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:29540] | |
| NOBOX | NOBOX oogenesis homeobox [Source:HGNC Symbol;Acc:22448] | |
| NOC4L | Nucleolar complex associated 4 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:28461] | |
| NOD1 | Nucleotide-binding oligomerization domain containing 1 [Source:HGNC Symbol;Acc:16390] | |
| NOD2 | Nucleotide-binding oligomerization domain containing 2 [Source:HGNC Symbol;Acc:5331] | |
| NOL10 | Nucleolar protein 10 [Source:HGNC Symbol;Acc:25862] | |
| NOL8 | Nucleolar protein 8 [Source:HGNC Symbol;Acc:23387] | |
| NOLC1 | Nucleolar and coiled-body phosphoprotein 1 [Source:HGNC Symbol;Acc:15608] | |
| NOM1 | Nucleolar protein with MIF4G domain 1 [Source:HGNC Symbol;Acc:13244] | |
| NONO | Non-POU domain containing, octamer-binding | √ |
| NOP2 | NOP2 nucleolar protein homolog (yeast) [Source:HGNC Symbol;Acc:7867] | |
| NOS1 | Nitric oxide synthase 1 (neuronal) [Source:HGNC Symbol;Acc:7872] | |
| NOS1AP | Nitric oxide synthase 1 (neuronal) adaptor protein [Source:HGNC Symbol;Acc:16859] | |
| NOS2 | Nitric oxide synthase 2, inducible [Source:HGNC Symbol;Acc:7873] | |
| NOS3 | Nitric oxide synthase 3 (endothelial cell) [Source:HGNC Symbol;Acc:7876] | |
| NOSTRIN | Nitric oxide synthase trafficker [Source:HGNC Symbol;Acc:20203] | |

| | | |
|-----------------|--|---|
| NOTCH1 | Notch 1 | √ |
| NOTCH2 | Notch 2 | √ |
| NOTCH2NL | Notch 2 N-terminal like [Source:HGNC Symbol;Acc:31862] | |
| NOTCH3 | Notch 3 [Source:HGNC Symbol;Acc:7883] | |
| NOTCH4 | Notch 4 [Source:HGNC Symbol;Acc:7884] | |
| NOTUM | Notum pectinacetylerase homolog (Drosophila) [Source:HGNC Symbol;Acc:27106] | |
| NOVA1 | Neuro-oncological ventral antigen 1 [Source:HGNC Symbol;Acc:7886] | |
| NOVA2 | Neuro-oncological ventral antigen 2 [Source:HGNC Symbol;Acc:7887] | |
| NOX5 | NADPH oxidase, EF-hand calcium binding domain 5 [Source:HGNC Symbol;Acc:14874] | |
| NPAS4 | Neuronal PAS domain protein 4 [Source:HGNC Symbol;Acc:18983] | |
| NPC1 | Niemann-Pick disease, type C1 [Source:HGNC Symbol;Acc:7897] | |
| NPEPL1 | Aminopeptidase-like 1 [Source:HGNC Symbol;Acc:16244] | |
| NPFF | Neuropeptide FF-amide peptide precursor [Source:HGNC Symbol;Acc:7901] | |
| NPHP1 | Nephronophthisis 1 (juvenile) [Source:HGNC Symbol;Acc:7905] | |
| NPHP3 | Nephronophthisis 3 (adolescent) [Source:HGNC Symbol;Acc:7907] | |
| NPHP4 | Nephronophthisis 4 [Source:HGNC Symbol;Acc:19104] | |
| NPHS1 | Nephrosis 1, congenital, Finnish type (nephrin) [Source:HGNC Symbol;Acc:7908] | |
| NPLOC4 | Nuclear protein localization 4 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:18261] | |
| NPR1 | Natriuretic peptide receptor A/guanylate cyclase A (atrionatriuretic peptide receptor A) [Source:HGNC Symbol;Acc:7943] | |
| NPRL2 | Nitrogen permease regulator-like 2 (S. Cerevisiae) [Source:HGNC Symbol;Acc:24969] | |
| NPTN | Neuroplastin [Source:HGNC Symbol;Acc:17867] | |
| NPY5R | Neuropeptide Y receptor Y5 [Source:HGNC Symbol;Acc:7958] | |
| NQO1 | NAD(P)H dehydrogenase, quinone 1 [Source:HGNC Symbol;Acc:2874] | |
| NR1D1 | Nuclear receptor subfamily 1, group D, member 1 [Source:HGNC Symbol;Acc:7962] | |

| | | |
|--------------|---|--|
| NR1H2 | Nuclear receptor subfamily 1, group H, member 2 [Source:HGNC Symbol;Acc:7965] | |
| NR1H3 | Nuclear receptor subfamily 1, group H, member 3 [Source:HGNC Symbol;Acc:7966] | |
| NR1H4 | Nuclear receptor subfamily 1, group H, member 4 [Source:HGNC Symbol;Acc:7967] | |
| NR1I2 | Nuclear receptor subfamily 1, group I, member 2 [Source:HGNC Symbol;Acc:7968] | |
| NR2E1 | Nuclear receptor subfamily 2, group E, member 1 [Source:HGNC Symbol;Acc:7973] | |
| NR2F1 | Nuclear receptor subfamily 2, group F, member 1 [Source:HGNC Symbol;Acc:7975] | |
| NR2F2 | Nuclear receptor subfamily 2, group F, member 2 [Source:HGNC Symbol;Acc:7976] | |
| NR3C1 | Nuclear receptor subfamily 3, group C, member 1 (glucocorticoid receptor) [Source:HGNC Symbol;Acc:7978] | |
| NR3C2 | Nuclear receptor subfamily 3, group C, member 2 [Source:HGNC Symbol;Acc:7979] | |
| NRAP | Nebulin-related anchoring protein [Source:HGNC Symbol;Acc:7988] | |
| NRARP | NOTCH-regulated ankyrin repeat protein [Source:HGNC Symbol;Acc:33843] | |
| NRBP1 | Nuclear receptor binding protein 1 [Source:HGNC Symbol;Acc:7993] | |
| NRBP2 | Nuclear receptor binding protein 2 [Source:HGNC Symbol;Acc:19339] | |
| NRF1 | Nuclear respiratory factor 1 [Source:HGNC Symbol;Acc:7996] | |
| NRG2 | Neuregulin 2 [Source:HGNC Symbol;Acc:7998] | |
| NRGN | Neurogranin (protein kinase C substrate, RC3) [Source:HGNC Symbol;Acc:8000] | |
| NRIP2 | Nuclear receptor interacting protein 2 [Source:HGNC Symbol;Acc:23078] | |
| NRM | Nurim (nuclear envelope membrane protein) [Source:HGNC Symbol;Acc:8003] | |
| NRP1 | Neuropilin 1 [Source:HGNC Symbol;Acc:8004] | |
| NRP2 | Neuropilin 2 [Source:HGNC Symbol;Acc:8005] | |
| NRXN1 | Neurexin 1 [Source:HGNC Symbol;Acc:8008] | |

| | | |
|---------------|---|---|
| NRXN3 | Neurexin 3 [Source:HGNC Symbol;Acc:8010] | |
| NSA2 | NSA2 ribosome biogenesis homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:30728] | |
| NSF | N-ethylmaleimide-sensitive factor [Source:HGNC Symbol;Acc:8016] | |
| NSMAF | Neutral sphingomyelinase (N-smase) activation associated factor [Source:HGNC Symbol;Acc:8017] | |
| NSUN4 | NOP2/Sun domain family, member 4 [Source:HGNC Symbol;Acc:31802] | |
| NSUN5 | NOP2/Sun domain family, member 5 [Source:HGNC Symbol;Acc:16385] | |
| NSUN7 | NOP2/Sun domain family, member 7 [Source:HGNC Symbol;Acc:25857] | |
| NT5C1A | 5'-nucleotidase, cytosolic IA [Source:HGNC Symbol;Acc:17819] | |
| NT5C1B | 5'-nucleotidase, cytosolic IB [Source:HGNC Symbol;Acc:17818] | |
| NT5C2 | 5'-nucleotidase, cytosolic II | √ |
| NT5DC3 | 5'-nucleotidase domain containing 3 [Source:HGNC Symbol;Acc:30826] | |
| NT5DC4 | 5'-nucleotidase domain containing 4 [Source:HGNC Symbol;Acc:27678] | |
| NT5M | 5',3'-nucleotidase, mitochondrial [Source:HGNC Symbol;Acc:15769] | |
| NTN5 | Netrin 5 [Source:HGNC Symbol;Acc:25208] | |
| NTNG1 | Netrin G1 [Source:HGNC Symbol;Acc:23319] | |
| NTNG2 | Netrin G2 [Source:HGNC Symbol;Acc:14288] | |
| NTRK1 | Neurotrophic tyrosine kinase, receptor, type 1 [Source:HGNC Symbol;Acc:8031] | |
| NTRK2 | Neurotrophic tyrosine kinase, receptor, type 2 [Source:HGNC Symbol;Acc:8032] | |
| NTRK3 | Neurotrophic tyrosine kinase, receptor, type 3 | √ |
| NTSR1 | Neurotensin receptor 1 (high affinity) [Source:HGNC Symbol;Acc:8039] | |
| NTSR2 | Neurotensin receptor 2 [Source:HGNC Symbol;Acc:8040] | |
| NUCB1 | Nucleobindin 1 [Source:HGNC Symbol;Acc:8043] | |
| NUDT1 | Nudix (nucleoside diphosphate linked moiety X)-type motif 1 [Source:HGNC Symbol;Acc:8048] | |
| NUDT11 | Nudix (nucleoside diphosphate linked moiety X)-type motif 11 [Source:HGNC Symbol;Acc:18011] | |
| NUDT14 | Nudix (nucleoside diphosphate linked moiety X)-type motif 14 [Source:HGNC Symbol;Acc:20141] | |

| | | |
|----------------|--|---|
| NUDT18 | Nudix (nucleoside diphosphate linked moiety X)-type motif 18 [Source:HGNC Symbol;Acc:26194] | |
| NUDT21 | Nudix (nucleoside diphosphate linked moiety X)-type motif 21 [Source:HGNC Symbol;Acc:13870] | |
| NUDT5 | Nudix (nucleoside diphosphate linked moiety X)-type motif 5 [Source:HGNC Symbol;Acc:8052] | |
| NUDT9 | Nudix (nucleoside diphosphate linked moiety X)-type motif 9 [Source:HGNC Symbol;Acc:8056] | |
| NUFIP1 | Nuclear fragile X mental retardation protein interacting protein 1 [Source:HGNC Symbol;Acc:8057] | |
| NUMBL | Numb homolog (Drosophila)-like [Source:HGNC Symbol;Acc:8061] | |
| NUP133 | Nucleoporin 133kda [Source:HGNC Symbol;Acc:18016] | |
| NUP188 | Nucleoporin 188kda [Source:HGNC Symbol;Acc:17859] | |
| NUP205 | Nucleoporin 205kda [Source:HGNC Symbol;Acc:18658] | |
| NUP210 | Nucleoporin 210 kDa | |
| NUP210L | Nucleoporin 210 kDa-like | |
| NUP214 | Nucleoporin 214 kDa | √ |
| NUP50 | Nucleoporin 50 kDa | |
| NUP85 | Nucleoporin 85 kDa | |
| NUP93 | Nucleoporin 93 kDa | |
| NUP98 | Nucleoporin 98 kDa | √ |
| NUPL1 | Nucleoporin like 1 [Source:HGNC Symbol;Acc:20261] | |
| NUS1 | Nuclear undecaprenyl pyrophosphate synthase 1 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:21042] | |
| NUTF2 | Nuclear transport factor 2 [Source:HGNC Symbol;Acc:13722] | |
| NWD1 | NACHT and WD repeat domain containing 1 [Source:HGNC Symbol;Acc:27619] | |
| NXF1 | Nuclear RNA export factor 1 [Source:HGNC Symbol;Acc:8071] | |
| NXPH1 | Neurexophilin 1 [Source:HGNC Symbol;Acc:20693] | |
| NYNRIN | NYN domain and retroviral integrase containing [Source:HGNC Symbol;Acc:20165] | |
| OAF | OAF homolog (Drosophila) [Source:HGNC Symbol;Acc:28752] | |
| OAZ1 | Ornithine decarboxylase antizyme 1 [Source:HGNC Symbol;Acc:8095] | |

| | | |
|----------------|--|---|
| OBFC2A | Oligonucleotide/oligosaccharide-binding fold containing 2A [Source:HGNC Symbol;Acc:26232] | |
| OBSCN | Obscurin, cytoskeletal calmodulin and titin-interacting rhogef [Source:HGNC Symbol;Acc:15719] | |
| OBSL1 | Obscurin-like 1 [Source:HGNC Symbol;Acc:29092] | |
| OC90 | Otoconin 90 [Source:HGNC Symbol;Acc:8100] | |
| OCIAD2 | OCIA domain containing 2 [Source:HGNC Symbol;Acc:28685] | |
| OCM | Oncomodulin [Source:HGNC Symbol;Acc:8105] | |
| OCM2 | Oncomodulin 2 [Source:HGNC Symbol;Acc:34396] | |
| ODF1 | Outer dense fiber of sperm tails 1 [Source:HGNC Symbol;Acc:8113] | |
| ODF4 | Outer dense fiber of sperm tails 4 [Source:HGNC Symbol;Acc:19056] | |
| ODZ1 | Odz, odd Oz/ten-m homolog 1(Drosophila) [Source:HGNC Symbol;Acc:8117] | |
| ODZ2 | Odz, odd Oz/ten-m homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:29943] | |
| ODZ3 | Odz, odd Oz/ten-m homolog 3 (Drosophila) [Source:HGNC Symbol;Acc:29944] | |
| ODZ4 | Odz, odd Oz/ten-m homolog 4 (Drosophila) [Source:HGNC Symbol;Acc:29945] | |
| OGT | O-linked N-acetylglucosamine (glcnac) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase) [Source:HGNC Symbol;Acc:8127] | |
| OIP5 | Opa interacting protein 5 [Source:HGNC Symbol;Acc:20300] | |
| OIT3 | Oncoprotein induced transcript 3 [Source:HGNC Symbol;Acc:29953] | |
| OLA1 | Obg-like atpase 1 [Source:HGNC Symbol;Acc:28833] | |
| OLFM1 | Olfactomedin 1 [Source:HGNC Symbol;Acc:17187] | |
| OLFM3 | Olfactomedin 3 [Source:HGNC Symbol;Acc:17990] | |
| OLFML1 | Olfactomedin-like 1 [Source:HGNC Symbol;Acc:24473] | |
| OLFML2A | Olfactomedin-like 2A [Source:HGNC Symbol;Acc:27270] | |
| OLIG2 | Oligodendrocyte lineage transcription factor 2 | √ |
| ONECUT2 | One cut homeobox 2 [Source:HGNC Symbol;Acc:8139] | |
| ONECUT3 | One cut homeobox 3 [Source:HGNC Symbol;Acc:13399] | |

| | | |
|---------------|---|--|
| OPA3 | Optic atrophy 3 (autosomal recessive, with chorea and spastic paraplegia) [Source:HGNC Symbol;Acc:8142] | |
| OPCML | Opioid binding protein/cell adhesion molecule-like [Source:HGNC Symbol;Acc:8143] | |
| OPHN1 | Oligophrenin 1 [Source:HGNC Symbol;Acc:8148] | |
| OPLAH | 5-oxoprolinase (ATP-hydrolysing) [Source:HGNC Symbol;Acc:8149] | |
| OPN5 | Opsin 5 [Source:HGNC Symbol;Acc:19992] | |
| OPRD1 | Opioid receptor, delta 1 [Source:HGNC Symbol;Acc:8153] | |
| OPRK1 | Opioid receptor, kappa 1 [Source:HGNC Symbol;Acc:8154] | |
| OPRM1 | Opioid receptor, mu 1 [Source:HGNC Symbol;Acc:8156] | |
| OPTN | Optineurin [Source:HGNC Symbol;Acc:17142] | |
| OR10A6 | Olfactory receptor, family 10, subfamily A, member 6 [Source:HGNC Symbol;Acc:15132] | |
| OR10A7 | Olfactory receptor, family 10, subfamily A, member 7 [Source:HGNC Symbol;Acc:15329] | |
| OR10G4 | Olfactory receptor, family 10, subfamily G, member 4 [Source:HGNC Symbol;Acc:14809] | |
| OR10G7 | Olfactory receptor, family 10, subfamily G, member 7 [Source:HGNC Symbol;Acc:14842] | |
| OR10G9 | Olfactory receptor, family 10, subfamily G, member 9 [Source:HGNC Symbol;Acc:15129] | |
| OR10R2 | Olfactory receptor, family 10, subfamily R, member 2 [Source:HGNC Symbol;Acc:14820] | |
| OR11H6 | Olfactory receptor, family 11, subfamily H, member 6 [Source:HGNC Symbol;Acc:15349] | |
| OR12D3 | Olfactory receptor, family 12, subfamily D, member 3 [Source:HGNC Symbol;Acc:13963] | |
| OR1A1 | Olfactory receptor, family 1, subfamily A, member 1 [Source:HGNC Symbol;Acc:8179] | |
| OR1B1 | Olfactory receptor, family 1, subfamily B, member 1 [Source:HGNC Symbol;Acc:8181] | |
| OR1D2 | Olfactory receptor, family 1, subfamily D, member 2 [Source:HGNC Symbol;Acc:8183] | |

| | | |
|---------------|---|--|
| OR1G1 | Olfactory receptor, family 1, subfamily G, member 1 [Source:HGNC Symbol;Acc:8204] | |
| OR1I1 | Olfactory receptor, family 1, subfamily I, member 1 [Source:HGNC Symbol;Acc:8207] | |
| OR1K1 | Olfactory receptor, family 1, subfamily K, member 1 [Source:HGNC Symbol;Acc:8212] | |
| OR1L4 | Olfactory receptor, family 1, subfamily L, member 4 [Source:HGNC Symbol;Acc:8216] | |
| OR1L6 | Olfactory receptor, family 1, subfamily L, member 6 [Source:HGNC Symbol;Acc:8218] | |
| OR2A14 | Olfactory receptor, family 2, subfamily A, member 14 [Source:HGNC Symbol;Acc:15084] | |
| OR2AE1 | Olfactory receptor, family 2, subfamily AE, member 1 [Source:HGNC Symbol;Acc:15087] | |
| OR2AG1 | Olfactory receptor, family 2, subfamily AG, member 1 [Source:HGNC Symbol;Acc:15142] | |
| OR2B11 | Olfactory receptor, family 2, subfamily B, member 11 [Source:HGNC Symbol;Acc:31249] | |
| OR2L13 | Olfactory receptor, family 2, subfamily L, member 13 [Source:HGNC Symbol;Acc:19578] | |
| OR2M2 | Olfactory receptor, family 2, subfamily M, member 2 [Source:HGNC Symbol;Acc:8268] | |
| OR2M3 | Olfactory receptor, family 2, subfamily M, member 3 [Source:HGNC Symbol;Acc:8269] | |
| OR2M4 | Olfactory receptor, family 2, subfamily M, member 4 [Source:HGNC Symbol;Acc:8270] | |
| OR2M5 | Olfactory receptor, family 2, subfamily M, member 5 [Source:HGNC Symbol;Acc:19576] | |
| OR2M7 | Olfactory receptor, family 2, subfamily M, member 7 [Source:HGNC Symbol;Acc:19594] | |
| OR3A1 | Olfactory receptor, family 3, subfamily A, member 1 [Source:HGNC Symbol;Acc:8282] | |

| | | |
|---------------|---|--|
| OR3A2 | Olfactory receptor, family 3, subfamily A, member 2 [Source:HGNC Symbol;Acc:8283] | |
| OR3A3 | Olfactory receptor, family 3, subfamily A, member 3 [Source:HGNC Symbol;Acc:8284] | |
| OR4A47 | Olfactory receptor, family 4, subfamily A, member 47 [Source:HGNC Symbol;Acc:31266] | |
| OR4D1 | Olfactory receptor, family 4, subfamily D, member 1 [Source:HGNC Symbol;Acc:8293] | |
| OR51B4 | Olfactory receptor, family 51, subfamily B, member 4 [Source:HGNC Symbol;Acc:14708] | |
| OR51G2 | Olfactory receptor, family 51, subfamily G, member 2 [Source:HGNC Symbol;Acc:15198] | |
| OR52B2 | Olfactory receptor, family 52, subfamily B, member 2 [Source:HGNC Symbol;Acc:15207] | |
| OR52B4 | Olfactory receptor, family 52, subfamily B, member 4 [Source:HGNC Symbol;Acc:15209] | |
| OR52L1 | Olfactory receptor, family 52, subfamily L, member 1 [Source:HGNC Symbol;Acc:14785] | |
| OR52N5 | Olfactory receptor, family 52, subfamily N, member 5 [Source:HGNC Symbol;Acc:15231] | |
| OR52R1 | Olfactory receptor, family 52, subfamily R, member 1 [Source:HGNC Symbol;Acc:15235] | |
| OR5C1 | Olfactory receptor, family 5, subfamily C, member 1 [Source:HGNC Symbol;Acc:8331] | |
| OR5L1 | Olfactory receptor, family 5, subfamily L, member 1 [Source:HGNC Symbol;Acc:8350] | |
| OR5L2 | Olfactory receptor, family 5, subfamily L, member 2 [Source:HGNC Symbol;Acc:8351] | |
| OR5M8 | Olfactory receptor, family 5, subfamily M, member 8 [Source:HGNC Symbol;Acc:14846] | |
| OR5R1 | Olfactory receptor, family 5, subfamily R, member 1 [Source:HGNC Symbol;Acc:14841] | |

| | | |
|---------------|---|--|
| OR6C2 | Olfactory receptor, family 6, subfamily C, member 2 [Source:HGNC Symbol;Acc:15436] | |
| OR6C68 | Olfactory receptor, family 6, subfamily C, member 68 [Source:HGNC Symbol;Acc:31297] | |
| OR6Q1 | Olfactory receptor, family 6, subfamily Q, member 1 [Source:HGNC Symbol;Acc:15302] | |
| OR6T1 | Olfactory receptor, family 6, subfamily T, member 1 [Source:HGNC Symbol;Acc:14848] | |
| OR7D2 | Olfactory receptor, family 7, subfamily D, member 2 [Source:HGNC Symbol;Acc:8378] | |
| OR7E24 | Olfactory receptor, family 7, subfamily E, member 24 [Source:HGNC Symbol;Acc:8396] | |
| OR8A1 | Olfactory receptor, family 8, subfamily A, member 1 [Source:HGNC Symbol;Acc:8469] | |
| OR8H1 | Olfactory receptor, family 8, subfamily H, member 1 [Source:HGNC Symbol;Acc:14824] | |
| OR8I2 | Olfactory receptor, family 8, subfamily I, member 2 [Source:HGNC Symbol;Acc:15310] | |
| OR8K3 | Olfactory receptor, family 8, subfamily K, member 3 [Source:HGNC Symbol;Acc:15313] | |
| OR9K2 | Olfactory receptor, family 9, subfamily K, member 2 [Source:HGNC Symbol;Acc:15339] | |
| OR9Q1 | Olfactory receptor, family 9, subfamily Q, member 1 [Source:HGNC Symbol;Acc:14724] | |
| ORAI1 | ORAI calcium release-activated calcium modulator 1 [Source:HGNC Symbol;Acc:25896] | |
| ORAI2 | ORAI calcium release-activated calcium modulator 2 [Source:HGNC Symbol;Acc:21667] | |
| ORAOV1 | Oral cancer overexpressed 1 [Source:HGNC Symbol;Acc:17589] | |
| ORC1 | Origin recognition complex, subunit 1 [Source:HGNC Symbol;Acc:8487] | |
| ORMDL2 | ORM1-like 2 (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:16037] | |
| ORMDL3 | ORM1-like 3 (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:16038] | |
| OSBP2 | Oxysterol binding protein 2 [Source:HGNC Symbol;Acc:8504] | |

| | | |
|----------------|--|--|
| OSBPL10 | Oxysterol binding protein-like 10 [Source:HGNC Symbol;Acc:16395] | |
| OSBPL1A | Oxysterol binding protein-like 1A [Source:HGNC Symbol;Acc:16398] | |
| OSBPL3 | Oxysterol binding protein-like 3 [Source:HGNC Symbol;Acc:16370] | |
| OSBPL5 | Oxysterol binding protein-like 5 [Source:HGNC Symbol;Acc:16392] | |
| OSBPL6 | Oxysterol binding protein-like 6 [Source:HGNC Symbol;Acc:16388] | |
| OSBPL8 | Oxysterol binding protein-like 8 [Source:HGNC Symbol;Acc:16396] | |
| OSMR | Oncostatin M receptor [Source:HGNC Symbol;Acc:8507] | |
| OSTC | Oligosaccharyltransferase complex subunit [Source:HGNC Symbol;Acc:24448] | |
| OSTM1 | Osteopetrosis associated transmembrane protein 1 [Source:HGNC Symbol;Acc:21652] | |
| OTOG | Otogelin [Source:HGNC Symbol;Acc:8516] | |
| OTOGL | Otogelin-like [Source:HGNC Symbol;Acc:26901] | |
| OTOP3 | Otopettrin 3 [Source:HGNC Symbol;Acc:19658] | |
| OTP | Orthopedia homeobox [Source:HGNC Symbol;Acc:8518] | |
| OTUD4 | OTU domain containing 4 [Source:HGNC Symbol;Acc:24949] | |
| OTUD7A | OTU domain containing 7A [Source:HGNC Symbol;Acc:20718] | |
| OVCH1 | Ovochymase 1 [Source:HGNC Symbol;Acc:23080] | |
| OXER1 | Oxoecosanoid (OXE) receptor 1 [Source:HGNC Symbol;Acc:24884] | |
| OXNAD1 | Oxidoreductase NAD-binding domain containing 1 [Source:HGNC Symbol;Acc:25128] | |
| P2RX3 | Purinergic receptor P2X, ligand-gated ion channel, 3 [Source:HGNC Symbol;Acc:8534] | |
| P2RX4 | Purinergic receptor P2X, ligand-gated ion channel, 4 [Source:HGNC Symbol;Acc:8535] | |
| P2RX5 | Purinergic receptor P2X, ligand-gated ion channel, 5 [Source:HGNC Symbol;Acc:8536] | |
| P2RX6 | Purinergic receptor P2X, ligand-gated ion channel, 6 [Source:HGNC Symbol;Acc:8538] | |
| P2RY1 | Purinergic receptor P2Y, G-protein coupled, 1 [Source:HGNC Symbol;Acc:8539] | |
| P2RY12 | Purinergic receptor P2Y, G-protein coupled, 12 [Source:HGNC Symbol;Acc:18124] | |

| | | |
|------------------|---|---|
| P2RY14 | Purinergic receptor P2Y, G-protein coupled, 14 [Source:HGNC Symbol;Acc:16442] | |
| P2RY8 | Purinergic receptor P2Y, G-protein coupled, 8 | √ |
| P4HA1 | Prolyl 4-hydroxylase, alpha polypeptide I [Source:HGNC Symbol;Acc:8546] | |
| P4HA2 | Prolyl 4-hydroxylase, alpha polypeptide II [Source:HGNC Symbol;Acc:8547] | |
| PABPC1 | Poly(A) binding protein, cytoplasmic 1 [Source:HGNC Symbol;Acc:8554] | |
| PABPC1L2B | Poly(A) binding protein, cytoplasmic 1-like 2B [Source:HGNC Symbol;Acc:31852] | |
| PACS1 | Phosphofurin acidic cluster sorting protein 1 [Source:HGNC Symbol;Acc:30032] | |
| PACSN2 | Protein kinase C and casein kinase substrate in neurons 2 [Source:HGNC Symbol;Acc:8571] | |
| PADI4 | Peptidyl arginine deiminase, type IV [Source:HGNC Symbol;Acc:18368] | |
| PAFAH1B2 | Platelet-activating factor acetylhydrolase 1b, catalytic subunit 2 (30 kDa) | √ |
| PAFAH1B3 | Platelet-activating factor acetylhydrolase 1b, catalytic subunit 3 (29 kDa) | |
| PAFAH2 | Platelet-activating factor acetylhydrolase 2, 40kDa [Source:HGNC Symbol;Acc:8579] | |
| PAGE1 | P antigen family, member 1 (prostate associated) [Source:HGNC Symbol;Acc:4107] | |
| PAGE4 | P antigen family, member 4 (prostate associated) [Source:HGNC Symbol;Acc:4108] | |
| PAK1 | P21 protein (Cdc42/Rac)-activated kinase 1 [Source:HGNC Symbol;Acc:8590] | |
| PAK2 | P21 protein (Cdc42/Rac)-activated kinase 2 [Source:HGNC Symbol;Acc:8591] | |
| PAK6 | P21 protein (Cdc42/Rac)-activated kinase 6 [Source:HGNC Symbol;Acc:16061] | |
| PAK7 | P21 protein (Cdc42/Rac)-activated kinase 7 [Source:HGNC Symbol;Acc:15916] | |
| PALB2 | Partner and localizer of BRCA2 | √ |
| PALLD | Palladin, cytoskeletal associated protein [Source:HGNC Symbol;Acc:17068] | |

| | | |
|--------------------|---|--|
| PALM2-AKAP2 | PALM2-AKAP2 readthrough [Source:HGNC Symbol;Acc:33529] | |
| PAMR1 | Peptidase domain containing associated with muscle regeneration 1 [Source:HGNC Symbol;Acc:24554] | |
| PAN2 | PAN2 poly(A) specific ribonuclease subunit homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:20074] | |
| PAN3 | PAN3 poly(A) specific ribonuclease subunit homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:29991] | |
| PANK1 | Pantothenate kinase 1 [Source:HGNC Symbol;Acc:8598] | |
| PANK3 | Pantothenate kinase 3 [Source:HGNC Symbol;Acc:19365] | |
| PANX2 | Pannexin 2 [Source:HGNC Symbol;Acc:8600] | |
| PAPD4 | PAP associated domain containing 4 [Source:HGNC Symbol;Acc:26776] | |
| PAPD5 | PAP associated domain containing 5 [Source:HGNC Symbol;Acc:30758] | |
| PAPD7 | PAP associated domain containing 7 [Source:HGNC Symbol;Acc:16705] | |
| PAPLN | Papilin, proteoglycan-like sulfated glycoprotein [Source:HGNC Symbol;Acc:19262] | |
| PAPPA | Pregnancy-associated plasma protein A, pappalysin 1 [Source:HGNC Symbol;Acc:8602] | |
| PAPPA2 | Pappalysin 2 [Source:HGNC Symbol;Acc:14615] | |
| PAQR3 | Progesterin and adiponectin receptor family member III [Source:HGNC Symbol;Acc:30130] | |
| PAQR5 | Progesterin and adiponectin receptor family member V [Source:HGNC Symbol;Acc:29645] | |
| PAQR6 | Progesterin and adiponectin receptor family member VI [Source:HGNC Symbol;Acc:30132] | |
| PAQR8 | Progesterin and adiponectin receptor family member VIII [Source:HGNC Symbol;Acc:15708] | |
| PARD3B | Par-3 partitioning defective 3 homolog B (C. Elegans) [Source:HGNC Symbol;Acc:14446] | |
| PARD6B | Par-6 partitioning defective 6 homolog beta (C. Elegans) [Source:HGNC Symbol;Acc:16245] | |
| PARD6G | Par-6 partitioning defective 6 homolog gamma (C. Elegans) [Source:HGNC Symbol;Acc:16076] | |

| | | |
|---------------|---|---|
| PARM1 | Prostate androgen-regulated mucin-like protein 1 [Source:HGNC Symbol;Acc:24536] | |
| PARP10 | Poly (ADP-ribose) polymerase family, member 10 [Source:HGNC Symbol;Acc:25895] | |
| PARP11 | Poly (ADP-ribose) polymerase family, member 11 [Source:HGNC Symbol;Acc:1186] | |
| PARP12 | Poly (ADP-ribose) polymerase family, member 12 [Source:HGNC Symbol;Acc:21919] | |
| PARP15 | Poly (ADP-ribose) polymerase family, member 15 [Source:HGNC Symbol;Acc:26876] | |
| PARP2 | Poly (ADP-ribose) polymerase 2 [Source:HGNC Symbol;Acc:272] | |
| PARP8 | Poly (ADP-ribose) polymerase family, member 8 [Source:HGNC Symbol;Acc:26124] | |
| PARS2 | Prolyl-trna synthetase 2, mitochondrial (putative) [Source:HGNC Symbol;Acc:30563] | |
| PARVB | Parvin, beta [Source:HGNC Symbol;Acc:14653] | |
| PASK | PAS domain containing serine/threonine kinase [Source:HGNC Symbol;Acc:17270] | |
| PATL1 | Protein associated with topoisomerase II homolog 1 (yeast) [Source:HGNC Symbol;Acc:26721] | |
| PAX2 | Paired box 2 [Source:HGNC Symbol;Acc:8616] | |
| PAX4 | Paired box 4 [Source:HGNC Symbol;Acc:8618] | |
| PAX5 | Paired box 5 | √ |
| PAX6 | Paired box 6 [Source:HGNC Symbol;Acc:8620] | |
| PAX7 | Paired box 7 | √ |
| PBLD | Phenazine biosynthesis-like protein domain containing [Source:HGNC Symbol;Acc:23301] | |
| PBRM1 | Polybromo 1 | √ |
| PBX1 | Pre-B-cell leukemia homeobox 1 | √ |
| PBX2 | Pre-B-cell leukemia homeobox 2 [Source:HGNC Symbol;Acc:8633] | |
| PC | Pyruvate carboxylase [Source:HGNC Symbol;Acc:8636] | |

| | | |
|----------------|---|--|
| PCBD2 | Pterin-4 alpha-carbinolamine dehydratase/dimerization cofactor of hepatocyte nuclear factor 1 alpha (TCF1) 2 [Source:HGNC Symbol;Acc:24474] | |
| PCBP2 | Poly(rc) binding protein 2 [Source:HGNC Symbol;Acc:8648] | |
| PCBP3 | Poly(rc) binding protein 3 [Source:HGNC Symbol;Acc:8651] | |
| PCCB | Propionyl coa carboxylase, beta polypeptide [Source:HGNC Symbol;Acc:8654] | |
| PCDH10 | Protocadherin 10 [Source:HGNC Symbol;Acc:13404] | |
| PCDH11X | Protocadherin 11 X-linked [Source:HGNC Symbol;Acc:8656] | |
| PCDH11Y | Protocadherin 11 Y-linked [Source:HGNC Symbol;Acc:15813] | |
| PCDH12 | Protocadherin 12 [Source:HGNC Symbol;Acc:8657] | |
| PCDH15 | Protocadherin-related 15 [Source:HGNC Symbol;Acc:14674] | |
| PCDH19 | Protocadherin 19 [Source:HGNC Symbol;Acc:14270] | |
| PCDH8 | Protocadherin 8 [Source:HGNC Symbol;Acc:8660] | |
| PCDH9 | Protocadherin 9 [Source:HGNC Symbol;Acc:8661] | |
| PCDHA1 | Protocadherin alpha 1 [Source:HGNC Symbol;Acc:8663] | |
| PCDHA10 | Protocadherin alpha 10 [Source:HGNC Symbol;Acc:8664] | |
| PCDHA11 | Protocadherin alpha 11 [Source:HGNC Symbol;Acc:8665] | |
| PCDHA12 | Protocadherin alpha 12 [Source:HGNC Symbol;Acc:8666] | |
| PCDHA13 | Protocadherin alpha 13 [Source:HGNC Symbol;Acc:8667] | |
| PCDHA2 | Protocadherin alpha 2 [Source:HGNC Symbol;Acc:8668] | |
| PCDHA3 | Protocadherin alpha 3 [Source:HGNC Symbol;Acc:8669] | |
| PCDHA4 | Protocadherin alpha 4 [Source:HGNC Symbol;Acc:8670] | |
| PCDHA5 | Protocadherin alpha 5 [Source:HGNC Symbol;Acc:8671] | |
| PCDHA6 | Protocadherin alpha 6 [Source:HGNC Symbol;Acc:8672] | |
| PCDHA7 | Protocadherin alpha 7 [Source:HGNC Symbol;Acc:8673] | |
| PCDHA8 | Protocadherin alpha 8 [Source:HGNC Symbol;Acc:8674] | |
| PCDHA9 | Protocadherin alpha 9 [Source:HGNC Symbol;Acc:8675] | |
| PCDHAC1 | Protocadherin alpha subfamily C, 1 [Source:HGNC Symbol;Acc:8676] | |
| PCDHAC2 | Protocadherin alpha subfamily C, 2 [Source:HGNC Symbol;Acc:8677] | |
| PCDHB13 | Protocadherin beta 13 [Source:HGNC Symbol;Acc:8684] | |
| PCDHB15 | Protocadherin beta 15 [Source:HGNC Symbol;Acc:8686] | |
| PCDHB16 | Protocadherin beta 16 [Source:HGNC Symbol;Acc:14546] | |

| | | |
|-----------------|--|--|
| PCDHB3 | Protocadherin beta 3 [Source:HGNC Symbol;Acc:8688] | |
| PCDHB4 | Protocadherin beta 4 [Source:HGNC Symbol;Acc:8689] | |
| PCDHB6 | Protocadherin beta 6 [Source:HGNC Symbol;Acc:8691] | |
| PCDHB7 | Protocadherin beta 7 [Source:HGNC Symbol;Acc:8692] | |
| PCDHGA1 | Protocadherin gamma subfamily A, 1 [Source:HGNC Symbol;Acc:8696] | |
| PCDHGA11 | Protocadherin gamma subfamily A, 11 [Source:HGNC Symbol;Acc:8698] | |
| PCDHGA5 | Protocadherin gamma subfamily A, 5 [Source:HGNC Symbol;Acc:8703] | |
| PCDHGA6 | Protocadherin gamma subfamily A, 6 [Source:HGNC Symbol;Acc:8704] | |
| PCDHGA7 | Protocadherin gamma subfamily A, 7 [Source:HGNC Symbol;Acc:8705] | |
| PCDHGC3 | Protocadherin gamma subfamily C, 3 [Source:HGNC Symbol;Acc:8716] | |
| PCF11 | PCF11, cleavage and polyadenylation factor subunit, homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:30097] | |
| PCGF2 | Polycomb group ring finger 2 [Source:HGNC Symbol;Acc:12929] | |
| PCGF3 | Polycomb group ring finger 3 [Source:HGNC Symbol;Acc:10066] | |
| PCNT | Pericentrin [Source:HGNC Symbol;Acc:16068] | |
| PCNX | Pecanex homolog (Drosophila) [Source:HGNC Symbol;Acc:19740] | |
| PCSK5 | Proprotein convertase subtilisin/kexin type 5 [Source:HGNC Symbol;Acc:8747] | |
| PCSK6 | Proprotein convertase subtilisin/kexin type 6 [Source:HGNC Symbol;Acc:8569] | |
| PCSK9 | Proprotein convertase subtilisin/kexin type 9 [Source:HGNC Symbol;Acc:20001] | |
| PCYOX1 | Preylcysteine oxidase 1 [Source:HGNC Symbol;Acc:20588] | |
| PCYOX1L | Preylcysteine oxidase 1 like [Source:HGNC Symbol;Acc:28477] | |
| PDCD11 | Programmed cell death 11 [Source:HGNC Symbol;Acc:13408] | |
| PDCD5 | Programmed cell death 5 [Source:HGNC Symbol;Acc:8764] | |
| PDCD6IP | Programmed cell death 6 interacting protein [Source:HGNC Symbol;Acc:8766] | |
| PDCD7 | Programmed cell death 7 [Source:HGNC Symbol;Acc:8767] | |
| PDDC1 | Parkinson disease 7 domain containing 1 [Source:HGNC Symbol;Acc:26616] | |
| PDE1A | Phosphodiesterase 1A, calmodulin-dependent [Source:HGNC Symbol;Acc:8774] | |

| | | |
|----------------|---|---|
| PDE1B | Phosphodiesterase 1B, calmodulin-dependent [Source:HGNC Symbol;Acc:8775] | |
| PDE2A | Phosphodiesterase 2A, cgmp-stimulated [Source:HGNC Symbol;Acc:8777] | |
| PDE4DIP | Phosphodiesterase 4D interacting protein | √ |
| PDE7A | Phosphodiesterase 7A [Source:HGNC Symbol;Acc:8791] | |
| PDE7B | Phosphodiesterase 7B [Source:HGNC Symbol;Acc:8792] | |
| PDE8A | Phosphodiesterase 8A [Source:HGNC Symbol;Acc:8793] | |
| PDE8B | Phosphodiesterase 8B [Source:HGNC Symbol;Acc:8794] | |
| PDE9A | Phosphodiesterase 9A [Source:HGNC Symbol;Acc:8795] | |
| PDGFD | Platelet derived growth factor D [Source:HGNC Symbol;Acc:30620] | |
| PDGFRA | Platelet-derived growth factor receptor, alpha polypeptide | √ |
| PDGFRB | Platelet-derived growth factor receptor, beta polypeptide | √ |
| PDGFRL | Platelet-derived growth factor receptor-like [Source:HGNC Symbol;Acc:8805] | |
| PDHA2 | Pyruvate dehydrogenase (lipoamide) alpha 2 [Source:HGNC Symbol;Acc:8807] | |
| PDIA6 | Protein disulfide isomerase family A, member 6 [Source:HGNC Symbol;Acc:30168] | |
| PDIK1L | PDLIM1 interacting kinase 1 like [Source:HGNC Symbol;Acc:18981] | |
| PDILT | Protein disulfide isomerase-like, testis expressed [Source:HGNC Symbol;Acc:27338] | |
| PDK2 | Pyruvate dehydrogenase kinase, isozyme 2 [Source:HGNC Symbol;Acc:8810] | |
| PDK4 | Pyruvate dehydrogenase kinase, isozyme 4 [Source:HGNC Symbol;Acc:8812] | |
| PDLIM1 | PDZ and LIM domain 1 [Source:HGNC Symbol;Acc:2067] | |
| PDLIM4 | PDZ and LIM domain 4 [Source:HGNC Symbol;Acc:16501] | |
| PDLIM5 | PDZ and LIM domain 5 [Source:HGNC Symbol;Acc:17468] | |
| PDP1 | Pyruvate dehydrogenase phosphatase catalytic subunit 1 [Source:HGNC Symbol;Acc:9279] | |
| PDP2 | Pyruvate dehydrogenase phosphatase catalytic subunit 2 [Source:HGNC Symbol;Acc:30263] | |

| | | |
|----------------|--|---|
| PDPK1 | 3-phosphoinositide dependent protein kinase-1 [Source:HGNC Symbol;Acc:8816] | |
| PDPR | Pyruvate dehydrogenase phosphatase regulatory subunit [Source:HGNC Symbol;Acc:30264] | |
| PDRG1 | P53 and DNA-damage regulated 1 [Source:HGNC Symbol;Acc:16119] | |
| PDS5B | PDS5, regulator of cohesion maintenance, homolog B (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:20418] | |
| PDSS2 | Prenyl (decaprenyl) diphosphate synthase, subunit 2 [Source:HGNC Symbol;Acc:23041] | |
| PDXDC1 | Pyridoxal-dependent decarboxylase domain containing 1 [Source:HGNC Symbol;Acc:28995] | |
| PDZD2 | PDZ domain containing 2 [Source:HGNC Symbol;Acc:18486] | |
| PDZD3 | PDZ domain containing 3 [Source:HGNC Symbol;Acc:19891] | |
| PDZRN3 | PDZ domain containing ring finger 3 [Source:HGNC Symbol;Acc:17704] | |
| PDZRN4 | PDZ domain containing ring finger 4 [Source:HGNC Symbol;Acc:30552] | |
| PEF1 | Penta-EF-hand domain containing 1 [Source:HGNC Symbol;Acc:30009] | |
| PELI2 | Pellino homolog 2 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:8828] | |
| PELI3 | Pellino homolog 3 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:30010] | |
| PEPD | Peptidase D [Source:HGNC Symbol;Acc:8840] | |
| PER1 | Period homolog 1 (<i>Drosophila</i>) | √ |
| PER2 | Period homolog 2 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:8846] | |
| PER3 | Period homolog 3 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:8847] | |
| PES1 | Pescadillo homolog 1, containing BRCT domain (zebrafish) [Source:HGNC Symbol;Acc:8848] | |
| PET112L | PET112-like (yeast) [Source:HGNC Symbol;Acc:8849] | |
| PEX11B | Peroxisomal biogenesis factor 11 beta [Source:HGNC Symbol;Acc:8853] | |
| PEX12 | Peroxisomal biogenesis factor 12 [Source:HGNC Symbol;Acc:8854] | |
| PEX13 | Peroxisomal biogenesis factor 13 [Source:HGNC Symbol;Acc:8855] | |
| PEX2 | Peroxisomal biogenesis factor 2 [Source:HGNC Symbol;Acc:9717] | |
| PEX5 | Peroxisomal biogenesis factor 5 [Source:HGNC Symbol;Acc:9719] | |
| PEX5L | Peroxisomal biogenesis factor 5-like [Source:HGNC Symbol;Acc:30024] | |
| PFAS | Phosphoribosylformylglycinamide synthase [Source:HGNC Symbol;Acc:8863] | |

| | | |
|----------------|---|--|
| PFDN2 | Prefoldin subunit 2 [Source:HGNC Symbol;Acc:8867] | |
| PFDN4 | Prefoldin subunit 4 [Source:HGNC Symbol;Acc:8868] | |
| PFKFB2 | 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2 [Source:HGNC Symbol;Acc:8873] | |
| PFKFB4 | 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4 [Source:HGNC Symbol;Acc:8875] | |
| PFKM | Phosphofructokinase, muscle [Source:HGNC Symbol;Acc:8877] | |
| PGAP2 | Post-GPI attachment to proteins 2 [Source:HGNC Symbol;Acc:17893] | |
| PGAP3 | Post-GPI attachment to proteins 3 [Source:HGNC Symbol;Acc:23719] | |
| PGBD5 | Piggybac transposable element derived 5 [Source:HGNC Symbol;Acc:19405] | |
| PGD | Phosphogluconate dehydrogenase [Source:HGNC Symbol;Acc:8891] | |
| PGK1 | Phosphoglycerate kinase 1 [Source:HGNC Symbol;Acc:8896] | |
| PGK2 | Phosphoglycerate kinase 2 [Source:HGNC Symbol;Acc:8898] | |
| PGM1 | Phosphoglucomutase 1 [Source:HGNC Symbol;Acc:8905] | |
| PGM2 | Phosphoglucomutase 2 [Source:HGNC Symbol;Acc:8906] | |
| PGR | Progesterone receptor [Source:HGNC Symbol;Acc:8910] | |
| PGRMC1 | Progesterone receptor membrane component 1 [Source:HGNC Symbol;Acc:16090] | |
| PGRMC2 | Progesterone receptor membrane component 2 [Source:HGNC Symbol;Acc:16089] | |
| PGS1 | Phosphatidylglycerophosphate synthase 1 [Source:HGNC Symbol;Acc:30029] | |
| PHACTR1 | Phosphatase and actin regulator 1 [Source:HGNC Symbol;Acc:20990] | |
| PHACTR4 | Phosphatase and actin regulator 4 [Source:HGNC Symbol;Acc:25793] | |
| PHC2 | Polyhomeotic homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:3183] | |
| PHF1 | PHD finger protein 1 [Source:HGNC Symbol;Acc:8919] | |
| PHF10 | PHD finger protein 10 [Source:HGNC Symbol;Acc:18250] | |
| PHF12 | PHD finger protein 12 [Source:HGNC Symbol;Acc:20816] | |
| PHF14 | PHD finger protein 14 [Source:HGNC Symbol;Acc:22203] | |
| PHF15 | PHD finger protein 15 [Source:HGNC Symbol;Acc:22984] | |
| PHF16 | PHD finger protein 16 [Source:HGNC Symbol;Acc:22982] | |
| PHF2 | PHD finger protein 2 [Source:HGNC Symbol;Acc:8920] | |

| | | |
|----------------|--|---|
| PHF20 | PHD finger protein 20 [Source:HGNC Symbol;Acc:16098] | |
| PHF20L1 | PHD finger protein 20-like 1 [Source:HGNC Symbol;Acc:24280] | |
| PHF21A | PHD finger protein 21A [Source:HGNC Symbol;Acc:24156] | |
| PHF6 | PHD finger protein 6 | √ |
| PHF7 | PHD finger protein 7 [Source:HGNC Symbol;Acc:18458] | |
| PHF8 | PHD finger protein 8 [Source:HGNC Symbol;Acc:20672] | |
| PHIP | Pleckstrin homology domain interacting protein [Source:HGNC Symbol;Acc:15673] | |
| PHKA2 | Phosphorylase kinase, alpha 2 (liver) [Source:HGNC Symbol;Acc:8926] | |
| PHKG2 | Phosphorylase kinase, gamma 2 (testis) [Source:HGNC Symbol;Acc:8931] | |
| PHLDA1 | Pleckstrin homology-like domain, family A, member 1 [Source:HGNC Symbol;Acc:8933] | |
| PHLDB1 | Pleckstrin homology-like domain, family B, member 1 [Source:HGNC Symbol;Acc:23697] | |
| PHLDB2 | Pleckstrin homology-like domain, family B, member 2 [Source:HGNC Symbol;Acc:29573] | |
| PHLPP1 | PH domain and leucine rich repeat protein phosphatase 1 [Source:HGNC Symbol;Acc:20610] | |
| PHLPP2 | PH domain and leucine rich repeat protein phosphatase 2 [Source:HGNC Symbol;Acc:29149] | |
| PHOX2B | Paired-like homeobox 2b | √ |
| PHRF1 | PHD and ring finger domains 1 [Source:HGNC Symbol;Acc:24351] | |
| PHTF2 | Putative homeodomain transcription factor 2 [Source:HGNC Symbol;Acc:13411] | |
| PHYHD1 | Phytanoyl-coa dioxygenase domain containing 1 [Source:HGNC Symbol;Acc:23396] | |
| PI15 | Peptidase inhibitor 15 [Source:HGNC Symbol;Acc:8946] | |
| PI4K2A | Phosphatidylinositol 4-kinase type 2 alpha [Source:HGNC Symbol;Acc:30031] | |
| PI4K2B | Phosphatidylinositol 4-kinase type 2 beta [Source:HGNC Symbol;Acc:18215] | |
| PI4KA | Phosphatidylinositol 4-kinase, catalytic, alpha [Source:HGNC Symbol;Acc:8983] | |

| | | |
|----------------|---|---|
| PI4KB | Phosphatidylinositol 4-kinase, catalytic, beta [Source:HGNC Symbol;Acc:8984] | |
| PIGA | Phosphatidylinositol glycan anchor biosynthesis, class A [Source:HGNC Symbol;Acc:8957] | |
| PIGC | Phosphatidylinositol glycan anchor biosynthesis, class C [Source:HGNC Symbol;Acc:8960] | |
| PIGF | Phosphatidylinositol glycan anchor biosynthesis, class F [Source:HGNC Symbol;Acc:8962] | |
| PIGL | Phosphatidylinositol glycan anchor biosynthesis, class L [Source:HGNC Symbol;Acc:8966] | |
| PIGM | Phosphatidylinositol glycan anchor biosynthesis, class M [Source:HGNC Symbol;Acc:18858] | |
| PIGP | Phosphatidylinositol glycan anchor biosynthesis, class P [Source:HGNC Symbol;Acc:3046] | |
| PIGQ | Phosphatidylinositol glycan anchor biosynthesis, class Q [Source:HGNC Symbol;Acc:14135] | |
| PIGZ | Phosphatidylinositol glycan anchor biosynthesis, class Z [Source:HGNC Symbol;Acc:30596] | |
| PIK3C2B | Phosphoinositide-3-kinase, class 2, beta polypeptide [Source:HGNC Symbol;Acc:8972] | |
| PIK3CA | Phosphoinositide-3-kinase, catalytic, alpha polypeptide | √ |
| PIK3CG | Phosphoinositide-3-kinase, catalytic, gamma polypeptide [Source:HGNC Symbol;Acc:8978] | |
| PIK3IP1 | Phosphoinositide-3-kinase interacting protein 1 [Source:HGNC Symbol;Acc:24942] | |
| PIK3R1 | Phosphoinositide-3-kinase, regulatory subunit 1 (alpha) | √ |
| PIK3R3 | Phosphoinositide-3-kinase, regulatory subunit 3 (gamma) [Source:HGNC Symbol;Acc:8981] | |
| PIK3R4 | Phosphoinositide-3-kinase, regulatory subunit 4 [Source:HGNC Symbol;Acc:8982] | |
| PIKFYVE | Phosphoinositide kinase, FYVE finger containing [Source:HGNC Symbol;Acc:23785] | |

| | | |
|----------------|---|--|
| PINX1 | PIN2/TERF1 interacting, telomerase inhibitor 1 [Source:HGNC Symbol;Acc:30046] | |
| PION | Pigeon homolog (Drosophila) [Source:HGNC Symbol;Acc:28042] | |
| PIP4K2A | Phosphatidylinositol-5-phosphate 4-kinase, type II, alpha [Source:HGNC Symbol;Acc:8997] | |
| PIP5K1C | Phosphatidylinositol-4-phosphate 5-kinase, type I, gamma [Source:HGNC Symbol;Acc:8996] | |
| PITPNB | Phosphatidylinositol transfer protein, beta [Source:HGNC Symbol;Acc:9002] | |
| PITPNM1 | Phosphatidylinositol transfer protein, membrane-associated 1 [Source:HGNC Symbol;Acc:9003] | |
| PITPNM2 | Phosphatidylinositol transfer protein, membrane-associated 2 [Source:HGNC Symbol;Acc:21044] | |
| PITRM1 | Pitriylsin metallopeptidase 1 [Source:HGNC Symbol;Acc:17663] | |
| PIWIL2 | Piwi-like 2 (Drosophila) [Source:HGNC Symbol;Acc:17644] | |
| PIWIL3 | Piwi-like 3 (Drosophila) [Source:HGNC Symbol;Acc:18443] | |
| PIWIL4 | Piwi-like 4 (Drosophila) [Source:HGNC Symbol;Acc:18444] | |
| PKD1 | Polycystic kidney disease 1 (autosomal dominant) [Source:HGNC Symbol;Acc:9008] | |
| PKD1L2 | Polycystic kidney disease 1-like 2 [Source:HGNC Symbol;Acc:21715] | |
| PKD2 | Polycystic kidney disease 2 (autosomal dominant) [Source:HGNC Symbol;Acc:9009] | |
| PKDREJ | Polycystic kidney disease (polycystin) and REJ homolog (sperm receptor for egg jelly homolog, sea urchin) [Source:HGNC Symbol;Acc:9015] | |
| PKHD1 | Polycystic kidney and hepatic disease 1 (autosomal recessive) [Source:HGNC Symbol;Acc:9016] | |
| PKHD1L1 | Polycystic kidney and hepatic disease 1 (autosomal recessive)-like 1 [Source:HGNC Symbol;Acc:20313] | |
| PKLR | Pyruvate kinase, liver and RBC [Source:HGNC Symbol;Acc:9020] | |
| PKN1 | Protein kinase N1 [Source:HGNC Symbol;Acc:9405] | |
| PKNOX2 | PBX/knotted 1 homeobox 2 [Source:HGNC Symbol;Acc:16714] | |
| PLA2G15 | Phospholipase A2, group XV [Source:HGNC Symbol;Acc:17163] | |
| PLA2G16 | Phospholipase A2, group XVI [Source:HGNC Symbol;Acc:17825] | |

| | | |
|----------------|---|---|
| PLA2G2C | Phospholipase A2, group IIC [Source:HGNC Symbol;Acc:9032] | |
| PLA2G4A | Phospholipase A2, group IVA (cytosolic, calcium-dependent) [Source:HGNC Symbol;Acc:9035] | |
| PLA2G4B | Phospholipase A2, group IVB (cytosolic) [Source:HGNC Symbol;Acc:9036] | |
| PLA2G4D | Phospholipase A2, group IVD (cytosolic) [Source:HGNC Symbol;Acc:30038] | |
| PLA2G4F | Phospholipase A2, group IVF [Source:HGNC Symbol;Acc:27396] | |
| PLA2G6 | Phospholipase A2, group VI (cytosolic, calcium-independent) [Source:HGNC Symbol;Acc:9039] | |
| PLA2R1 | Phospholipase A2 receptor 1, 180kda [Source:HGNC Symbol;Acc:9042] | |
| PLAA | Phospholipase A2-activating protein [Source:HGNC Symbol;Acc:9043] | |
| PLAG1 | Pleiomorphic adenoma gene 1 | √ |
| PLAGL1 | Pleiomorphic adenoma gene-like 1 [Source:HGNC Symbol;Acc:9046] | |
| PLAU | Plasminogen activator, urokinase [Source:HGNC Symbol;Acc:9052] | |
| PLB1 | Phospholipase B1 [Source:HGNC Symbol;Acc:30041] | |
| PLBD2 | Phospholipase B domain containing 2 [Source:HGNC Symbol;Acc:27283] | |
| PLCB1 | Phospholipase C, beta 1 (phosphoinositide-specific) [Source:HGNC Symbol;Acc:15917] | |
| PLCB3 | Phospholipase C, beta 3 (phosphatidylinositol-specific) [Source:HGNC Symbol;Acc:9056] | |
| PLCG1 | Phospholipase C, gamma 1 [Source:HGNC Symbol;Acc:9065] | |
| PLCG2 | Phospholipase C, gamma 2 (phosphatidylinositol-specific) [Source:HGNC Symbol;Acc:9066] | |
| PLCH1 | Phospholipase C, eta 1 [Source:HGNC Symbol;Acc:29185] | |
| PLCL1 | Phospholipase C-like 1 [Source:HGNC Symbol;Acc:9063] | |
| PLCXD1 | Phosphatidylinositol-specific phospholipase C, X domain containing 1 [Source:HGNC Symbol;Acc:23148] | |
| PLD5 | Phospholipase D family, member 5 [Source:HGNC Symbol;Acc:26879] | |
| PLEC | Plectin [Source:HGNC Symbol;Acc:9069] | |
| PLEK2 | Pleckstrin 2 [Source:HGNC Symbol;Acc:19238] | |
| PLEKHA1 | Pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 1 [Source:HGNC Symbol;Acc:14335] | |

| | | |
|-----------------|---|--|
| PLEKHA3 | Pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 3 [Source:HGNC Symbol;Acc:14338] | |
| PLEKHA7 | Pleckstrin homology domain containing, family A member 7 [Source:HGNC Symbol;Acc:27049] | |
| PLEKHB2 | Pleckstrin homology domain containing, family B (evectins) member 2 [Source:HGNC Symbol;Acc:19236] | |
| PLEKHG2 | Pleckstrin homology domain containing, family G (with rhogef domain) member 2 [Source:HGNC Symbol;Acc:29515] | |
| PLEKHG4 | Pleckstrin homology domain containing, family G (with rhogef domain) member 4 [Source:HGNC Symbol;Acc:24501] | |
| PLEKHG4B | Pleckstrin homology domain containing, family G (with rhogef domain) member 4B [Source:HGNC Symbol;Acc:29399] | |
| PLEKHM1 | Pleckstrin homology domain containing, family M (with RUN domain) member 1 [Source:HGNC Symbol;Acc:29017] | |
| PLEKHM3 | Pleckstrin homology domain containing, family M, member 3 [Source:HGNC Symbol;Acc:34006] | |
| PLEKHO2 | Pleckstrin homology domain containing, family O member 2 [Source:HGNC Symbol;Acc:30026] | |
| PLG | Plasminogen [Source:HGNC Symbol;Acc:9071] | |
| PLIN1 | Perilipin 1 [Source:HGNC Symbol;Acc:9076] | |
| PLIN3 | Perilipin 3 [Source:HGNC Symbol;Acc:16893] | |
| PLIN4 | Perilipin 4 [Source:HGNC Symbol;Acc:29393] | |
| PLIN5 | Perilipin 5 [Source:HGNC Symbol;Acc:33196] | |
| PLK4 | Polo-like kinase 4 [Source:HGNC Symbol;Acc:11397] | |
| PLOD2 | Procollagen-lysine, 2-oxoglutarate 5-dioxygenase 2 [Source:HGNC Symbol;Acc:9082] | |
| PLS3 | Plastin 3 [Source:HGNC Symbol;Acc:9091] | |
| PLSCR1 | Phospholipid scramblase 1 [Source:HGNC Symbol;Acc:9092] | |
| PLVAP | Plasmalemma vesicle associated protein [Source:HGNC Symbol;Acc:13635] | |
| PLXDC2 | Plexin domain containing 2 [Source:HGNC Symbol;Acc:21013] | |
| PLXNA2 | Plexin A2 [Source:HGNC Symbol;Acc:9100] | |
| PLXNA3 | Plexin A3 [Source:HGNC Symbol;Acc:9101] | |
| PLXNA4 | Plexin A4 [Source:HGNC Symbol;Acc:9102] | |

| | | |
|-----------------|--|---|
| PLXNB1 | Plexin B1 [Source:HGNC Symbol;Acc:9103] | |
| PLXNB2 | Plexin B2 [Source:HGNC Symbol;Acc:9104] | |
| PLXNC1 | Plexin C1 [Source:HGNC Symbol;Acc:9106] | |
| PLXND1 | Plexin D1 [Source:HGNC Symbol;Acc:9107] | |
| PM20D2 | Peptidase M20 domain containing 2 [Source:HGNC Symbol;Acc:21408] | |
| PMFBP1 | Polyamine modulated factor 1 binding protein 1 [Source:HGNC Symbol;Acc:17728] | |
| PML | Promyelocytic leukemia | √ |
| PMM1 | Phosphomannomutase 1 [Source:HGNC Symbol;Acc:9114] | |
| PMM2 | Phosphomannomutase 2 [Source:HGNC Symbol;Acc:9115] | |
| PMPCB | Peptidase (mitochondrial processing) beta [Source:HGNC Symbol;Acc:9119] | |
| PNLDC1 | Poly(A)-specific ribonuclease (PARN)-like domain containing 1 [Source:HGNC Symbol;Acc:21185] | |
| PNLIPRP3 | Pancreatic lipase-related protein 3 [Source:HGNC Symbol;Acc:23492] | |
| PNMA3 | Paraneoplastic antigen MA3 [Source:HGNC Symbol;Acc:18742] | |
| PNMA5 | Paraneoplastic antigen like 5 [Source:HGNC Symbol;Acc:18743] | |
| PNN | Pinin, desmosome associated protein [Source:HGNC Symbol;Acc:9162] | |
| PNO1 | Partner of NOB1 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:32790] | |
| PNPLA1 | Patatin-like phospholipase domain containing 1 [Source:HGNC Symbol;Acc:21246] | |
| PNPLA2 | Patatin-like phospholipase domain containing 2 [Source:HGNC Symbol;Acc:30802] | |
| PNPLA3 | Patatin-like phospholipase domain containing 3 [Source:HGNC Symbol;Acc:18590] | |
| PNPLA6 | Patatin-like phospholipase domain containing 6 [Source:HGNC Symbol;Acc:16268] | |
| PNRC1 | Proline-rich nuclear receptor coactivator 1 [Source:HGNC Symbol;Acc:17278] | |
| POC1A | POC1 centriolar protein homolog A (Chlamydomonas) [Source:HGNC Symbol;Acc:24488] | |

| | | |
|----------------|--|--|
| POC1B | POC1 centriolar protein homolog B (Chlamydomonas) [Source:HGNC Symbol;Acc:30836] | |
| PODNL1 | Podocan-like 1 [Source:HGNC Symbol;Acc:26275] | |
| POFUT2 | Protein O-fucosyltransferase 2 [Source:HGNC Symbol;Acc:14683] | |
| POGK | Pogo transposable element with KRAB domain [Source:HGNC Symbol;Acc:18800] | |
| POGLUT1 | Protein O-glucosyltransferase 1 [Source:HGNC Symbol;Acc:22954] | |
| POGZ | Pogo transposable element with ZNF domain [Source:HGNC Symbol;Acc:18801] | |
| POLB | Polymerase (DNA directed), beta [Source:HGNC Symbol;Acc:9174] | |
| POLG | Polymerase (DNA directed), gamma [Source:HGNC Symbol;Acc:9179] | |
| POLH | Polymerase (DNA directed), eta [Source:HGNC Symbol;Acc:9181] | |
| POLK | Polymerase (DNA directed) kappa [Source:HGNC Symbol;Acc:9183] | |
| POLL | Polymerase (DNA directed), lambda [Source:HGNC Symbol;Acc:9184] | |
| POLN | Polymerase (DNA directed) nu [Source:HGNC Symbol;Acc:18870] | |
| POLR1B | Polymerase (RNA) I polypeptide B, 128kda [Source:HGNC Symbol;Acc:20454] | |
| POLR2B | Polymerase (RNA) II (DNA directed) polypeptide B, 140kda [Source:HGNC Symbol;Acc:9188] | |
| POLR2C | Polymerase (RNA) II (DNA directed) polypeptide C, 33kda [Source:HGNC Symbol;Acc:9189] | |
| POLR2D | Polymerase (RNA) II (DNA directed) polypeptide D [Source:HGNC Symbol;Acc:9191] | |
| POLR2E | Polymerase (RNA) II (DNA directed) polypeptide E, 25kda [Source:HGNC Symbol;Acc:9192] | |
| POLR2F | Polymerase (RNA) II (DNA directed) polypeptide F [Source:HGNC Symbol;Acc:9193] | |
| POLR3C | Polymerase (RNA) III (DNA directed) polypeptide C (62kd) [Source:HGNC Symbol;Acc:30076] | |
| POLR3D | Polymerase (RNA) III (DNA directed) polypeptide D, 44kda [Source:HGNC Symbol;Acc:1080] | |
| POLR3F | Polymerase (RNA) III (DNA directed) polypeptide F, 39 kda [Source:HGNC Symbol;Acc:15763] | |

| | | |
|-----------------|---|---|
| POLRMT | Polymerase (RNA) mitochondrial (DNA directed) [Source:HGNC Symbol;Acc:9200] | |
| POM121C | POM121 membrane glycoprotein C [Source:HGNC Symbol;Acc:34005] | |
| POM121L2 | POM121 membrane glycoprotein-like 2 [Source:HGNC Symbol;Acc:13973] | |
| POMT1 | Protein-O-mannosyltransferase 1 [Source:HGNC Symbol;Acc:9202] | |
| POMT2 | Protein-O-mannosyltransferase 2 [Source:HGNC Symbol;Acc:19743] | |
| PON2 | Paraoxonase 2 [Source:HGNC Symbol;Acc:9205] | |
| POP5 | Processing of precursor 5, ribonuclease P/MRP subunit (S. Cerevisiae) [Source:HGNC Symbol;Acc:17689] | |
| POPDC2 | Popeye domain containing 2 [Source:HGNC Symbol;Acc:17648] | |
| POU2AF1 | POU class 2 associating factor 1 | √ |
| POU2F1 | POU class 2 homeobox 1 [Source:HGNC Symbol;Acc:9212] | |
| POU3F2 | POU class 3 homeobox 2 [Source:HGNC Symbol;Acc:9215] | |
| POU4F3 | POU class 4 homeobox 3 [Source:HGNC Symbol;Acc:9220] | |
| POU6F1 | POU class 6 homeobox 1 [Source:HGNC Symbol;Acc:9224] | |
| POU6F2 | POU class 6 homeobox 2 [Source:HGNC Symbol;Acc:21694] | |
| PPAP2B | Phosphatidic acid phosphatase type 2B [Source:HGNC Symbol;Acc:9229] | |
| PPARA | Peroxisome proliferator-activated receptor alpha [Source:HGNC Symbol;Acc:9232] | |
| PPARD | Peroxisome proliferator-activated receptor delta [Source:HGNC Symbol;Acc:9235] | |
| PPARG | Peroxisome proliferator-activated receptor gamma | √ |
| PPARGC1A | Peroxisome proliferator-activated receptor gamma, coactivator 1 alpha [Source:HGNC Symbol;Acc:9237] | |
| PPARGC1B | Peroxisome proliferator-activated receptor gamma, coactivator 1 beta [Source:HGNC Symbol;Acc:30022] | |
| PPCDC | Phosphopantothencysteine decarboxylase [Source:HGNC Symbol;Acc:28107] | |
| PPFIA2 | Protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein (liprin), alpha 2 [Source:HGNC Symbol;Acc:9246] | |
| PPFIA3 | Protein tyrosine phosphatase, receptor type, f polypeptide (PTPRF), interacting protein (liprin), alpha 3 [Source:HGNC Symbol;Acc:9247] | |

| | | |
|-----------------|--|--|
| PPFIBP2 | PTPRF interacting protein, binding protein 2 (liprin beta 2) [Source:HGNC Symbol;Acc:9250] | |
| PPIA | Peptidylprolyl isomerase A (cyclophilin A) [Source:HGNC Symbol;Acc:9253] | |
| PPIG | Peptidylprolyl isomerase G (cyclophilin G) [Source:HGNC Symbol;Acc:14650] | |
| PPIH | Peptidylprolyl isomerase H (cyclophilin H) [Source:HGNC Symbol;Acc:14651] | |
| PPIL2 | Peptidylprolyl isomerase (cyclophilin)-like 2 [Source:HGNC Symbol;Acc:9261] | |
| PPIP5K2 | Diphosphoinositol pentakisphosphate kinase 2 [Source:HGNC Symbol;Acc:29035] | |
| PPL | Periplakin [Source:HGNC Symbol;Acc:9273] | |
| PPM1B | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1B [Source:HGNC Symbol;Acc:9276] | |
| PPM1E | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1E [Source:HGNC Symbol;Acc:19322] | |
| PPM1F | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1F [Source:HGNC Symbol;Acc:19388] | |
| PPM1J | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1J [Source:HGNC Symbol;Acc:20785] | |
| PPM1L | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1L [Source:HGNC Symbol;Acc:16381] | |
| PPM1M | Protein phosphatase, Mg ²⁺ /Mn ²⁺ dependent, 1M [Source:HGNC Symbol;Acc:26506] | |
| PPOX | Protoporphyrinogen oxidase [Source:HGNC Symbol;Acc:9280] | |
| PPP1R11 | Protein phosphatase 1, regulatory (inhibitor) subunit 11 [Source:HGNC Symbol;Acc:9285] | |
| PPP1R12A | Protein phosphatase 1, regulatory (inhibitor) subunit 12A [Source:HGNC Symbol;Acc:7618] | |
| PPP1R12C | Protein phosphatase 1, regulatory (inhibitor) subunit 12C [Source:HGNC Symbol;Acc:14947] | |

| | | |
|-----------------|--|--|
| PPP1R13B | Protein phosphatase 1, regulatory (inhibitor) subunit 13B [Source:HGNC Symbol;Acc:14950] | |
| PPP1R14C | Protein phosphatase 1, regulatory (inhibitor) subunit 14C [Source:HGNC Symbol;Acc:14952] | |
| PPP1R15A | Protein phosphatase 1, regulatory (inhibitor) subunit 15A [Source:HGNC Symbol;Acc:14375] | |
| PPP1R15B | Protein phosphatase 1, regulatory (inhibitor) subunit 15B [Source:HGNC Symbol;Acc:14951] | |
| PPP1R16B | Protein phosphatase 1, regulatory (inhibitor) subunit 16B [Source:HGNC Symbol;Acc:15850] | |
| PPP1R1C | Protein phosphatase 1, regulatory (inhibitor) subunit 1C [Source:HGNC Symbol;Acc:14940] | |
| PPP1R2 | Protein phosphatase 1, regulatory (inhibitor) subunit 2 [Source:HGNC Symbol;Acc:9288] | |
| PPP1R3A | Protein phosphatase 1, regulatory (inhibitor) subunit 3A [Source:HGNC Symbol;Acc:9291] | |
| PPP1R3B | Protein phosphatase 1, regulatory (inhibitor) subunit 3B [Source:HGNC Symbol;Acc:14942] | |
| PPP1R3F | Protein phosphatase 1, regulatory (inhibitor) subunit 3F [Source:HGNC Symbol;Acc:14944] | |
| PPP1R9A | Protein phosphatase 1, regulatory (inhibitor) subunit 9A [Source:HGNC Symbol;Acc:14946] | |
| PPP2CA | Protein phosphatase 2, catalytic subunit, alpha isozyme [Source:HGNC Symbol;Acc:9299] | |
| PPP2R1B | Protein phosphatase 2, regulatory subunit A, beta [Source:HGNC Symbol;Acc:9303] | |
| PPP2R2A | Protein phosphatase 2, regulatory subunit B, alpha [Source:HGNC Symbol;Acc:9304] | |
| PPP2R2D | Protein phosphatase 2, regulatory subunit B, delta [Source:HGNC Symbol;Acc:23732] | |
| PPP2R3A | Protein phosphatase 2, regulatory subunit B", alpha [Source:HGNC Symbol;Acc:9307] | |

| | | |
|-----------------|---|--|
| PPP2R3B | Protein phosphatase 2, regulatory subunit B", beta [Source:HGNC Symbol;Acc:13417] | |
| PPP2R4 | Protein phosphatase 2A activator, regulatory subunit 4 [Source:HGNC Symbol;Acc:9308] | |
| PPP2R5C | Protein phosphatase 2, regulatory subunit B', gamma [Source:HGNC Symbol;Acc:9311] | |
| PPP3CA | Protein phosphatase 3, catalytic subunit, alpha isozyme [Source:HGNC Symbol;Acc:9314] | |
| PPP3CB | Protein phosphatase 3, catalytic subunit, beta isozyme [Source:HGNC Symbol;Acc:9315] | |
| PPP3R1 | Protein phosphatase 3, regulatory subunit B, alpha [Source:HGNC Symbol;Acc:9317] | |
| PPP4R2 | Protein phosphatase 4, regulatory subunit 2 [Source:HGNC Symbol;Acc:18296] | |
| PPP6C | Protein phosphatase 6, catalytic subunit [Source:HGNC Symbol;Acc:9323] | |
| PPP6R2 | Protein phosphatase 6, regulatory subunit 2 [Source:HGNC Symbol;Acc:19253] | |
| PPT1 | Palmitoyl-protein thioesterase 1 [Source:HGNC Symbol;Acc:9325] | |
| PQLC1 | PQ loop repeat containing 1 [Source:HGNC Symbol;Acc:26188] | |
| PQLC2 | PQ loop repeat containing 2 [Source:HGNC Symbol;Acc:26001] | |
| PRAME | Preferentially expressed antigen in melanoma [Source:HGNC Symbol;Acc:9336] | |
| PRAMEF1 | PRAME family member 1 [Source:HGNC Symbol;Acc:28840] | |
| PRAMEF10 | PRAME family member 10 [Source:HGNC Symbol;Acc:27997] | |
| PRAMEF13 | PRAME family member 13 [Source:HGNC Symbol;Acc:13262] | |
| PRAMEF14 | PRAME family member 14 [Source:HGNC Symbol;Acc:13576] | |
| PRAMEF16 | PRAME family member 16 [Source:HGNC Symbol;Acc:25767] | |
| PRAMEF17 | PRAME family member 17 [Source:HGNC Symbol;Acc:29485] | |
| PRAMEF18 | PRAME family member 18 [Source:HGNC Symbol;Acc:30693] | |
| PRAMEF19 | PRAME family member 19 [Source:HGNC Symbol;Acc:24908] | |
| PRAMEF2 | PRAME family member 2 [Source:HGNC Symbol;Acc:28841] | |
| PRAMEF22 | PRAME family member 22 [Source:HGNC Symbol;Acc:34393] | |
| PRAMEF3 | PRAME family member 3 [Source:HGNC Symbol;Acc:14087] | |

| | | |
|-----------------|---|---|
| PRC1 | Protein regulator of cytokinesis 1 [Source:HGNC Symbol;Acc:9341] | |
| PRCD | Progressive rod-cone degeneration [Source:HGNC Symbol;Acc:32528] | |
| PRDM1 | PR domain containing 1, with ZNF domain | √ |
| PRDM10 | PR domain containing 10 [Source:HGNC Symbol;Acc:13995] | |
| PRDM12 | PR domain containing 12 [Source:HGNC Symbol;Acc:13997] | |
| PRDM15 | PR domain containing 15 [Source:HGNC Symbol;Acc:13999] | |
| PRDM16 | PR domain containing 16 | √ |
| PRDM5 | PR domain containing 5 [Source:HGNC Symbol;Acc:9349] | |
| PRDM7 | PR domain containing 7 [Source:HGNC Symbol;Acc:9351] | |
| PRDX2 | Peroxiredoxin 2 [Source:HGNC Symbol;Acc:9353] | |
| PRDX3 | Peroxiredoxin 3 [Source:HGNC Symbol;Acc:9354] | |
| PRDX5 | Peroxiredoxin 5 [Source:HGNC Symbol;Acc:9355] | |
| PREB | Prolactin regulatory element binding [Source:HGNC Symbol;Acc:9356] | |
| PRELID2 | PRELI domain containing 2 [Source:HGNC Symbol;Acc:28306] | |
| PREP | Prolyl endopeptidase [Source:HGNC Symbol;Acc:9358] | |
| PREPL | Prolyl endopeptidase-like [Source:HGNC Symbol;Acc:30228] | |
| PREX1 | Phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 1 [Source:HGNC Symbol;Acc:32594] | |
| PREX2 | Phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 2 [Source:HGNC Symbol;Acc:22950] | |
| PRICKLE1 | Prickle homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:17019] | |
| PRICKLE2 | Prickle homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:20340] | |
| PRICKLE3 | Prickle homolog 3 (Drosophila) [Source:HGNC Symbol;Acc:6645] | |
| PRICKLE4 | Prickle homolog 4 (Drosophila) [Source:HGNC Symbol;Acc:16805] | |
| PRIMA1 | Proline rich membrane anchor 1 [Source:HGNC Symbol;Acc:18319] | |
| PRKAA2 | Protein kinase, AMP-activated, alpha 2 catalytic subunit [Source:HGNC Symbol;Acc:9377] | |
| PRKAG1 | Protein kinase, AMP-activated, gamma 1 non-catalytic subunit [Source:HGNC Symbol;Acc:9385] | |
| PRKAG2 | Protein kinase, AMP-activated, gamma 2 non-catalytic subunit [Source:HGNC Symbol;Acc:9386] | |
| PRKCA | Protein kinase C, alpha [Source:HGNC Symbol;Acc:9393] | |
| PRKCB | Protein kinase C, beta [Source:HGNC Symbol;Acc:9395] | |

| | | |
|----------------|---|--|
| PRKCD | Protein kinase C, delta [Source:HGNC Symbol;Acc:9399] | |
| PRKCE | Protein kinase C, epsilon [Source:HGNC Symbol;Acc:9401] | |
| PRKCH | Protein kinase C, eta [Source:HGNC Symbol;Acc:9403] | |
| PRKD2 | Protein kinase D2 [Source:HGNC Symbol;Acc:17293] | |
| PRKD3 | Protein kinase D3 [Source:HGNC Symbol;Acc:9408] | |
| PRKDC | Protein kinase, DNA-activated, catalytic polypeptide [Source:HGNC Symbol;Acc:9413] | |
| PRKG1 | Protein kinase, cgmp-dependent, type I [Source:HGNC Symbol;Acc:9414] | |
| PRKRIP1 | PRKR interacting protein 1 (IL11 inducible) [Source:HGNC Symbol;Acc:21894] | |
| PRLR | Prolactin receptor [Source:HGNC Symbol;Acc:9446] | |
| PRMT1 | Protein arginine methyltransferase 1 [Source:HGNC Symbol;Acc:5187] | |
| PRMT5 | Protein arginine methyltransferase 5 [Source:HGNC Symbol;Acc:10894] | |
| PRMT6 | Protein arginine methyltransferase 6 [Source:HGNC Symbol;Acc:18241] | |
| PRMT7 | Protein arginine methyltransferase 7 [Source:HGNC Symbol;Acc:25557] | |
| PRMT8 | Protein arginine methyltransferase 8 [Source:HGNC Symbol;Acc:5188] | |
| PRND | Prion protein 2 (dublet) [Source:HGNC Symbol;Acc:15748] | |
| PRNP | Prion protein [Source:HGNC Symbol;Acc:9449] | |
| PRNT | Prion protein (testis specific) [Source:HGNC Symbol;Acc:18046] | |
| PROCR | Protein C receptor, endothelial [Source:HGNC Symbol;Acc:9452] | |
| PRODH | Proline dehydrogenase (oxidase) 1 [Source:HGNC Symbol;Acc:9453] | |
| PROM1 | Prominin 1 [Source:HGNC Symbol;Acc:9454] | |
| PROM2 | Prominin 2 [Source:HGNC Symbol;Acc:20685] | |
| PROX2 | Prospero homeobox 2 [Source:HGNC Symbol;Acc:26715] | |
| PROZ | Protein Z, vitamin K-dependent plasma glycoprotein [Source:HGNC Symbol;Acc:9460] | |
| PRPF4 | PRP4 pre-mrna processing factor 4 homolog (yeast) [Source:HGNC Symbol;Acc:17349] | |
| PRPF40A | PRP40 pre-mrna processing factor 40 homolog A (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:16463] | |
| PRPF4B | PRP4 pre-mrna processing factor 4 homolog B (yeast) [Source:HGNC Symbol;Acc:17346] | |

| | | |
|----------------|---|--|
| PRPF6 | PRP6 pre-mrna processing factor 6 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:15860] | |
| PRPF8 | PRP8 pre-mrna processing factor 8 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:17340] | |
| PRPH2 | Peripherin 2 (retinal degeneration, slow) [Source:HGNC Symbol;Acc:9942] | |
| PRPS1 | Phosphoribosyl pyrophosphate synthetase 1 [Source:HGNC Symbol;Acc:9462] | |
| PRPS2 | Phosphoribosyl pyrophosphate synthetase 2 [Source:HGNC Symbol;Acc:9465] | |
| PRPSAP2 | Phosphoribosyl pyrophosphate synthetase-associated protein 2 [Source:HGNC Symbol;Acc:9467] | |
| PRR12 | Proline rich 12 [Source:HGNC Symbol;Acc:29217] | |
| PRR14L | Proline rich 14-like [Source:HGNC Symbol;Acc:28738] | |
| PRR18 | Proline rich 18 [Source:HGNC Symbol;Acc:28574] | |
| PRR25 | Proline rich 25 [Source:HGNC Symbol;Acc:37230] | |
| PRR5 | Proline rich 5 (renal) [Source:HGNC Symbol;Acc:31682] | |
| PRR5L | Proline rich 5 like [Source:HGNC Symbol;Acc:25878] | |
| PRR7 | Proline rich 7 (synaptic) [Source:HGNC Symbol;Acc:28130] | |
| PRRC1 | Proline-rich coiled-coil 1 [Source:HGNC Symbol;Acc:28164] | |
| PRRC2B | Proline-rich coiled-coil 2B [Source:HGNC Symbol;Acc:28121] | |
| PRRG3 | Proline rich Gla (G-carboxyglutamic acid) 3 (transmembrane) [Source:HGNC Symbol;Acc:30798] | |
| PRRG4 | Proline rich Gla (G-carboxyglutamic acid) 4 (transmembrane) [Source:HGNC Symbol;Acc:30799] | |
| PRSS12 | Protease, serine, 12 (neurotrypsin, motopsin) [Source:HGNC Symbol;Acc:9477] | |
| PRSS16 | Protease, serine, 16 (thymus) [Source:HGNC Symbol;Acc:9480] | |
| PRSS23 | Protease, serine, 23 [Source:HGNC Symbol;Acc:14370] | |
| PRSS3 | Protease, serine, 3 [Source:HGNC Symbol;Acc:9486] | |
| PRSS42 | Protease, serine, 42 [Source:HGNC Symbol;Acc:30716] | |
| PRSS45 | Protease, serine, 45 [Source:HGNC Symbol;Acc:30717] | |
| PRSS54 | Protease, serine, 54 [Source:HGNC Symbol;Acc:26336] | |
| PRSS55 | Protease, serine, 55 [Source:HGNC Symbol;Acc:30824] | |

| | | |
|----------------|---|--|
| PRTFDC1 | Phosphoribosyl transferase domain containing 1 [Source:HGNC Symbol;Acc:23333] | |
| PRTG | Protogenin [Source:HGNC Symbol;Acc:26373] | |
| PRUNE2 | Prune homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:25209] | |
| PRX | Periaxin [Source:HGNC Symbol;Acc:13797] | |
| PSAP | Prosaposin [Source:HGNC Symbol;Acc:9498] | |
| PSAPL1 | Prosaposin-like 1 (gene/pseudogene) [Source:HGNC Symbol;Acc:33131] | |
| PSAT1 | Phosphoserine aminotransferase 1 [Source:HGNC Symbol;Acc:19129] | |
| PSCA | Prostate stem cell antigen [Source:HGNC Symbol;Acc:9500] | |
| PSD2 | Pleckstrin and Sec7 domain containing 2 [Source:HGNC Symbol;Acc:19092] | |
| PSD3 | Pleckstrin and Sec7 domain containing 3 [Source:HGNC Symbol;Acc:19093] | |
| PSG1 | Pregnancy specific beta-1-glycoprotein 1 [Source:HGNC Symbol;Acc:9514] | |
| PSG11 | Pregnancy specific beta-1-glycoprotein 11 [Source:HGNC Symbol;Acc:9516] | |
| PSG3 | Pregnancy specific beta-1-glycoprotein 3 [Source:HGNC Symbol;Acc:9520] | |
| PSG9 | Pregnancy specific beta-1-glycoprotein 9 [Source:HGNC Symbol;Acc:9526] | |
| PSKH1 | Protein serine kinase H1 [Source:HGNC Symbol;Acc:9529] | |
| PSMA4 | Proteasome (prosome, macropain) subunit, alpha type, 4 [Source:HGNC Symbol;Acc:9533] | |
| PSMA5 | Proteasome (prosome, macropain) subunit, alpha type, 5 [Source:HGNC Symbol;Acc:9534] | |
| PSMA8 | Proteasome (prosome, macropain) subunit, alpha type, 8 [Source:HGNC Symbol;Acc:22985] | |
| PSMB9 | Proteasome (prosome, macropain) subunit, beta type, 9 (large multifunctional peptidase 2) [Source:HGNC Symbol;Acc:9546] | |
| PSMC1 | Proteasome (prosome, macropain) 26S subunit, atpase, 1 [Source:HGNC Symbol;Acc:9547] | |

| | | |
|----------------|---|---|
| PSMC3 | Proteasome (prosome, macropain) 26S subunit, atpase, 3 [Source:HGNC Symbol;Acc:9549] | |
| PSMD13 | Proteasome (prosome, macropain) 26S subunit, non-atpase, 13 [Source:HGNC Symbol;Acc:9558] | |
| PSME4 | Proteasome (prosome, macropain) activator subunit 4 [Source:HGNC Symbol;Acc:20635] | |
| PSMF1 | Proteasome (prosome, macropain) inhibitor subunit 1 (PI31) [Source:HGNC Symbol;Acc:9571] | |
| PSMG4 | Proteasome (prosome, macropain) assembly chaperone 4 [Source:HGNC Symbol;Acc:21108] | |
| PSPC1 | Paraspeckle component 1 [Source:HGNC Symbol;Acc:20320] | |
| PSRC1 | Proline/serine-rich coiled-coil 1 [Source:HGNC Symbol;Acc:24472] | |
| PSTPIP1 | Proline-serine-threonine phosphatase interacting protein 1 [Source:HGNC Symbol;Acc:9580] | |
| PTCD3 | Pentatricopeptide repeat domain 3 [Source:HGNC Symbol;Acc:24717] | |
| PTCHD1 | Patched domain containing 1 [Source:HGNC Symbol;Acc:26392] | |
| PTCHD2 | Patched domain containing 2 [Source:HGNC Symbol;Acc:29251] | |
| PTCHD3 | Patched domain containing 3 [Source:HGNC Symbol;Acc:24776] | |
| PTDSS2 | Phosphatidylserine synthase 2 [Source:HGNC Symbol;Acc:15463] | |
| PTEN | Phosphatase and tensin homolog | √ |
| PTGDS | Prostaglandin D2 synthase 21kda (brain) [Source:HGNC Symbol;Acc:9592] | |
| PTGER3 | Prostaglandin E receptor 3 (subtype EP3) [Source:HGNC Symbol;Acc:9595] | |
| PTGES2 | Prostaglandin E synthase 2 [Source:HGNC Symbol;Acc:17822] | |
| PTGFRN | Prostaglandin F2 receptor negative regulator [Source:HGNC Symbol;Acc:9601] | |
| PTGIS | Prostaglandin I2 (prostacyclin) synthase [Source:HGNC Symbol;Acc:9603] | |
| PTGS1 | Prostaglandin-endoperoxide synthase 1 (prostaglandin G/H synthase and cyclooxygenase) [Source:HGNC Symbol;Acc:9604] | |
| PTGS2 | Prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase) [Source:HGNC Symbol;Acc:9605] | |
| PTH1R | Parathyroid hormone 1 receptor [Source:HGNC Symbol;Acc:9608] | |
| PTH2 | Parathyroid hormone 2 [Source:HGNC Symbol;Acc:30828] | |

| | | |
|---------------|---|---|
| PTH2R | Parathyroid hormone 2 receptor [Source:HGNC Symbol;Acc:9609] | |
| PTHLH | Parathyroid hormone-like hormone [Source:HGNC Symbol;Acc:9607] | |
| PTK2 | PTK2 protein tyrosine kinase 2 [Source:HGNC Symbol;Acc:9611] | |
| PTK2B | PTK2B protein tyrosine kinase 2 beta [Source:HGNC Symbol;Acc:9612] | |
| PTK7 | PTK7 protein tyrosine kinase 7 [Source:HGNC Symbol;Acc:9618] | |
| PTPN11 | Protein tyrosine phosphatase, non-receptor type 11 | √ |
| PTPN12 | Protein tyrosine phosphatase, non-receptor type 12 [Source:HGNC Symbol;Acc:9645] | |
| PTPN14 | Protein tyrosine phosphatase, non-receptor type 14 [Source:HGNC Symbol;Acc:9647] | |
| PTPN18 | Protein tyrosine phosphatase, non-receptor type 18 (brain-derived) [Source:HGNC Symbol;Acc:9649] | |
| PTPN22 | Protein tyrosine phosphatase, non-receptor type 22 (lymphoid) [Source:HGNC Symbol;Acc:9652] | |
| PTPN4 | Protein tyrosine phosphatase, non-receptor type 4 (megakaryocyte) [Source:HGNC Symbol;Acc:9656] | |
| PTPN5 | Protein tyrosine phosphatase, non-receptor type 5 (striatum-enriched) [Source:HGNC Symbol;Acc:9657] | |
| PTPN6 | Protein tyrosine phosphatase, non-receptor type 6 [Source:HGNC Symbol;Acc:9658] | |
| PTPN7 | Protein tyrosine phosphatase, non-receptor type 7 [Source:HGNC Symbol;Acc:9659] | |
| PTPRA | Protein tyrosine phosphatase, receptor type, A [Source:HGNC Symbol;Acc:9664] | |
| PTPRB | Protein tyrosine phosphatase, receptor type, B [Source:HGNC Symbol;Acc:9665] | |
| PTPRC | Protein tyrosine phosphatase, receptor type, C | √ |
| PTPRE | Protein tyrosine phosphatase, receptor type, E [Source:HGNC Symbol;Acc:9669] | |
| PTPRF | Protein tyrosine phosphatase, receptor type, F [Source:HGNC Symbol;Acc:9670] | |
| PTPRG | Protein tyrosine phosphatase, receptor type, G [Source:HGNC Symbol;Acc:9671] | |

| | | |
|----------------|--|--|
| PTPRJ | Protein tyrosine phosphatase, receptor type, J [Source:HGNC Symbol;Acc:9673] | |
| PTPRK | Protein tyrosine phosphatase, receptor type, K [Source:HGNC Symbol;Acc:9674] | |
| PTPRO | Protein tyrosine phosphatase, receptor type, O [Source:HGNC Symbol;Acc:9678] | |
| PTPRQ | Protein tyrosine phosphatase, receptor type, Q [Source:HGNC Symbol;Acc:9679] | |
| PTPRR | Protein tyrosine phosphatase, receptor type, R [Source:HGNC Symbol;Acc:9680] | |
| PTPRS | Protein tyrosine phosphatase, receptor type, S [Source:HGNC Symbol;Acc:9681] | |
| PTPRT | Protein tyrosine phosphatase, receptor type, T [Source:HGNC Symbol;Acc:9682] | |
| PTPRZ1 | Protein tyrosine phosphatase, receptor-type, Z polypeptide 1 [Source:HGNC Symbol;Acc:9685] | |
| PTRH1 | Peptidyl-trna hydrolase 1 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:27039] | |
| PVALB | Parvalbumin [Source:HGNC Symbol;Acc:9704] | |
| PVRL1 | Poliovirus receptor-related 1 (herpesvirus entry mediator C) [Source:HGNC Symbol;Acc:9706] | |
| PVRL3 | Poliovirus receptor-related 3 [Source:HGNC Symbol;Acc:17664] | |
| PVRL4 | Poliovirus receptor-related 4 [Source:HGNC Symbol;Acc:19688] | |
| PWP2 | PWP2 periodic tryptophan protein homolog (yeast) [Source:HGNC Symbol;Acc:9711] | |
| PXDN | Peroxidasin homolog (Drosophila) [Source:HGNC Symbol;Acc:14966] | |
| PXN | Paxillin [Source:HGNC Symbol;Acc:9718] | |
| PXT1 | Peroxisomal, testis specific 1 [Source:HGNC Symbol;Acc:18312] | |
| PYGB | Phosphorylase, glycogen; brain [Source:HGNC Symbol;Acc:9723] | |
| PYGO1 | Pygopus homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:30256] | |
| PYROXD1 | Pyridine nucleotide-disulphide oxidoreductase domain 1 [Source:HGNC Symbol;Acc:26162] | |

| | | |
|------------------|---|--|
| PYROXD2 | Pyridine nucleotide-disulphide oxidoreductase domain 2 [Source:HGNC Symbol;Acc:23517] | |
| QARS | Glutaminyl-trna synthetase [Source:HGNC Symbol;Acc:9751] | |
| QRICH1 | Glutamine-rich 1 [Source:HGNC Symbol;Acc:24713] | |
| QSER1 | Glutamine and serine rich 1 [Source:HGNC Symbol;Acc:26154] | |
| QSOX1 | Quiescin Q6 sulfhydryl oxidase 1 [Source:HGNC Symbol;Acc:9756] | |
| QSOX2 | Quiescin Q6 sulfhydryl oxidase 2 [Source:HGNC Symbol;Acc:30249] | |
| QTRTD1 | Queuine trna-ribosyltransferase domain containing 1 [Source:HGNC Symbol;Acc:25771] | |
| R3HDM2 | R3H domain containing 2 [Source:HGNC Symbol;Acc:29167] | |
| RAB11FIP1 | RAB11 family interacting protein 1 (class I) [Source:HGNC Symbol;Acc:30265] | |
| RAB11FIP3 | RAB11 family interacting protein 3 (class II) [Source:HGNC Symbol;Acc:17224] | |
| RAB11FIP4 | RAB11 family interacting protein 4 (class II) [Source:HGNC Symbol;Acc:30267] | |
| RAB12 | RAB12, member RAS oncogene family [Source:HGNC Symbol;Acc:31332] | |
| RAB17 | RAB17, member RAS oncogene family [Source:HGNC Symbol;Acc:16523] | |
| RAB18 | RAB18, member RAS oncogene family [Source:HGNC Symbol;Acc:14244] | |
| RAB20 | RAB20, member RAS oncogene family [Source:HGNC Symbol;Acc:18260] | |
| RAB22A | RAB22A, member RAS oncogene family [Source:HGNC Symbol;Acc:9764] | |
| RAB25 | RAB25, member RAS oncogene family [Source:HGNC Symbol;Acc:18238] | |
| RAB27B | RAB27B, member RAS oncogene family [Source:HGNC Symbol;Acc:9767] | |
| RAB2B | RAB2B, member RAS oncogene family [Source:HGNC Symbol;Acc:20246] | |
| RAB31 | RAB31, member RAS oncogene family [Source:HGNC Symbol;Acc:9771] | |
| RAB36 | RAB36, member RAS oncogene family [Source:HGNC Symbol;Acc:9775] | |
| RAB37 | RAB37, member RAS oncogene family [Source:HGNC Symbol;Acc:30268] | |
| RAB38 | RAB38, member RAS oncogene family [Source:HGNC Symbol;Acc:9776] | |
| RAB3B | RAB3B, member RAS oncogene family [Source:HGNC Symbol;Acc:9778] | |

| | | |
|-----------------|---|--|
| RAB3GAP1 | RAB3 gtpase activating protein subunit 1 (catalytic) [Source:HGNC Symbol;Acc:17063] | |
| RAB3GAP2 | RAB3 gtpase activating protein subunit 2 (non-catalytic) [Source:HGNC Symbol;Acc:17168] | |
| RAB3IL1 | RAB3A interacting protein (rabin3)-like 1 [Source:HGNC Symbol;Acc:9780] | |
| RAB3IP | RAB3A interacting protein (rabin3) [Source:HGNC Symbol;Acc:16508] | |
| RAB42 | RAB42, member RAS oncogene family [Source:HGNC Symbol;Acc:28702] | |
| RAB4A | RAB4A, member RAS oncogene family [Source:HGNC Symbol;Acc:9781] | |
| RAB5A | RAB5A, member RAS oncogene family [Source:HGNC Symbol;Acc:9783] | |
| RAB5B | RAB5B, member RAS oncogene family [Source:HGNC Symbol;Acc:9784] | |
| RAB6A | RAB6A, member RAS oncogene family [Source:HGNC Symbol;Acc:9786] | |
| RAB6B | RAB6B, member RAS oncogene family [Source:HGNC Symbol;Acc:14902] | |
| RAB6C | RAB6C, member RAS oncogene family [Source:HGNC Symbol;Acc:16525] | |
| RAB7L1 | RAB7, member RAS oncogene family-like 1 [Source:HGNC Symbol;Acc:9789] | |
| RAB8A | RAB8A, member RAS oncogene family [Source:HGNC Symbol;Acc:7007] | |
| RABEP1 | Rabaptin, RAB gtpase binding effector protein 1 [Source:HGNC Symbol;Acc:17677] | |
| RABEP2 | Rabaptin, RAB gtpase binding effector protein 2 [Source:HGNC Symbol;Acc:24817] | |
| RABGAP1 | RAB gtpase activating protein 1 [Source:HGNC Symbol;Acc:17155] | |
| RABGAP1L | RAB gtpase activating protein 1-like [Source:HGNC Symbol;Acc:24663] | |
| RABGEF1 | RAB guanine nucleotide exchange factor (GEF) 1 [Source:HGNC Symbol;Acc:17676] | |
| RABGGTB | Rab geranylgeranyltransferase, beta subunit [Source:HGNC Symbol;Acc:9796] | |
| RABL2A | RAB, member of RAS oncogene family-like 2A [Source:HGNC Symbol;Acc:9799] | |
| RABL5 | RAB, member RAS oncogene family-like 5 [Source:HGNC Symbol;Acc:21895] | |

| | | |
|-----------------|---|---|
| RAD1 | RAD1 homolog (S. Pombe) [Source:HGNC Symbol;Acc:9806] | |
| RAD17 | RAD17 homolog (S. Pombe) [Source:HGNC Symbol;Acc:9807] | |
| RAD21 | RAD21 homolog (<i>S. Pombe</i>) | √ |
| RAD23A | RAD23 homolog A (S. Cerevisiae) [Source:HGNC Symbol;Acc:9812] | |
| RAD50 | RAD50 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:9816] | |
| RAD51 | RAD51 homolog (reca homolog, E. Coli) (S. Cerevisiae) [Source:HGNC Symbol;Acc:9817] | |
| RAD52 | RAD52 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:9824] | |
| RAD54L2 | RAD54-like 2 (S. Cerevisiae) [Source:HGNC Symbol;Acc:29123] | |
| RAD9B | RAD9 homolog B (S. Pombe) [Source:HGNC Symbol;Acc:21700] | |
| RAET1G | Retinoic acid early transcript 1G [Source:HGNC Symbol;Acc:16795] | |
| RAET1L | Retinoic acid early transcript 1L [Source:HGNC Symbol;Acc:16798] | |
| RAF1 | V-raf-1 murine leukemia viral oncogene homolog 1 | √ |
| RAG1 | Recombination activating gene 1 [Source:HGNC Symbol;Acc:9831] | |
| RAG2 | Recombination activating gene 2 [Source:HGNC Symbol;Acc:9832] | |
| RAGE | Renal tumor antigen [Source:HGNC Symbol;Acc:9833] | |
| RAI1 | Retinoic acid induced 1 [Source:HGNC Symbol;Acc:9834] | |
| RAI14 | Retinoic acid induced 14 [Source:HGNC Symbol;Acc:14873] | |
| RALB | V-ral simian leukemia viral oncogene homolog B (ras related; GTP binding protein) [Source:HGNC Symbol;Acc:9840] | |
| RALBP1 | Rala binding protein 1 [Source:HGNC Symbol;Acc:9841] | |
| RALGAPA1 | Ral gtpase activating protein, alpha subunit 1 (catalytic) [Source:HGNC Symbol;Acc:17770] | |
| RALGAPA2 | Ral gtpase activating protein, alpha subunit 2 (catalytic) [Source:HGNC Symbol;Acc:16207] | |
| RALGDS | Ral guanine nucleotide dissociation stimulator | √ |
| RALGPS1 | Ral GEF with PH domain and SH3 binding motif 1 [Source:HGNC Symbol;Acc:16851] | |
| RALGPS2 | Ral GEF with PH domain and SH3 binding motif 2 [Source:HGNC Symbol;Acc:30279] | |
| RANBP17 | RAN binding protein 17 | √ |
| RANBP2 | RAN binding protein 2 [Source:HGNC Symbol;Acc:9848] | |
| RANGAP1 | Ran gtpase activating protein 1 [Source:HGNC Symbol;Acc:9854] | |

| | | |
|-----------------|--|--|
| RANGRF | RAN guanine nucleotide release factor [Source:HGNC Symbol;Acc:17679] | |
| RAP1GAP | RAP1 gtpase activating protein [Source:HGNC Symbol;Acc:9858] | |
| RAP2A | RAP2A, member of RAS oncogene family [Source:HGNC Symbol;Acc:9861] | |
| RAP2B | RAP2B, member of RAS oncogene family [Source:HGNC Symbol;Acc:9862] | |
| RAPGEF1 | Rap guanine nucleotide exchange factor (GEF) 1 [Source:HGNC Symbol;Acc:4568] | |
| RAPGEF3 | Rap guanine nucleotide exchange factor (GEF) 3 [Source:HGNC Symbol;Acc:16629] | |
| RAPGEF5 | Rap guanine nucleotide exchange factor (GEF) 5 [Source:HGNC Symbol;Acc:16862] | |
| RAPGEFL1 | Rap guanine nucleotide exchange factor (GEF)-like 1 [Source:HGNC Symbol;Acc:17428] | |
| RAPH1 | Ras association (ralgds/AF-6) and pleckstrin homology domains 1 [Source:HGNC Symbol;Acc:14436] | |
| RARB | Retinoic acid receptor, beta [Source:HGNC Symbol;Acc:9865] | |
| RARRES1 | Retinoic acid receptor responder (tazarotene induced) 1 [Source:HGNC Symbol;Acc:9867] | |
| RASA1 | RAS p21 protein activator (gtpase activating protein) 1 [Source:HGNC Symbol;Acc:9871] | |
| RASA3 | RAS p21 protein activator 3 [Source:HGNC Symbol;Acc:20331] | |
| RASAL1 | RAS protein activator like 1 (GAP1 like) [Source:HGNC Symbol;Acc:9873] | |
| RASAL2 | RAS protein activator like 2 [Source:HGNC Symbol;Acc:9874] | |
| RASD2 | RASD family, member 2 [Source:HGNC Symbol;Acc:18229] | |
| RASEF | RAS and EF-hand domain containing [Source:HGNC Symbol;Acc:26464] | |
| RASGEF1A | Rasgef domain family, member 1A [Source:HGNC Symbol;Acc:24246] | |
| RASGRF1 | Ras protein-specific guanine nucleotide-releasing factor 1 [Source:HGNC Symbol;Acc:9875] | |
| RASGRP2 | RAS guanyl releasing protein 2 (calcium and DAG-regulated) [Source:HGNC Symbol;Acc:9879] | |
| RASGRP3 | RAS guanyl releasing protein 3 (calcium and DAG-regulated) [Source:HGNC Symbol;Acc:14545] | |

| | | |
|-------------------|---|--|
| RASL10B | RAS-like, family 10, member B [Source:HGNC Symbol;Acc:30295] | |
| RASL12 | RAS-like, family 12 [Source:HGNC Symbol;Acc:30289] | |
| RAX2 | Retina and anterior neural fold homeobox 2 [Source:HGNC Symbol;Acc:18286] | |
| RBAK | RB-associated KRAB zinc finger [Source:HGNC Symbol;Acc:17680] | |
| RBBP5 | Retinoblastoma binding protein 5 [Source:HGNC Symbol;Acc:9888] | |
| RBBP6 | Retinoblastoma binding protein 6 [Source:HGNC Symbol;Acc:9889] | |
| RBBP9 | Retinoblastoma binding protein 9 [Source:HGNC Symbol;Acc:9892] | |
| RBFA | Ribosome binding factor A (putative) [Source:HGNC Symbol;Acc:26120] | |
| RBFOX1 | RNA binding protein, fox-1 homolog (C. Elegans) 1 [Source:HGNC Symbol;Acc:18222] | |
| RBFOX2 | RNA binding protein, fox-1 homolog (C. Elegans) 2 [Source:HGNC Symbol;Acc:9906] | |
| RBM11 | RNA binding motif protein 11 [Source:HGNC Symbol;Acc:9897] | |
| RBM14 | RNA binding motif protein 14 [Source:HGNC Symbol;Acc:14219] | |
| RBM14-RBM4 | RBM14-RBM4 readthrough [Source:HGNC Symbol;Acc:38840] | |
| RBM22 | RNA binding motif protein 22 [Source:HGNC Symbol;Acc:25503] | |
| RBM27 | RNA binding motif protein 27 [Source:HGNC Symbol;Acc:29243] | |
| RBM33 | RNA binding motif protein 33 [Source:HGNC Symbol;Acc:27223] | |
| RBM38 | RNA binding motif protein 38 [Source:HGNC Symbol;Acc:15818] | |
| RBM43 | RNA binding motif protein 43 [Source:HGNC Symbol;Acc:24790] | |
| RBM46 | RNA binding motif protein 46 [Source:HGNC Symbol;Acc:28401] | |
| RBM47 | RNA binding motif protein 47 [Source:HGNC Symbol;Acc:30358] | |
| RBM6 | RNA binding motif protein 6 [Source:HGNC Symbol;Acc:9903] | |
| RBMS1 | RNA binding motif, single stranded interacting protein 1 [Source:HGNC Symbol;Acc:9907] | |
| RBMS2 | RNA binding motif, single stranded interacting protein 2 [Source:HGNC Symbol;Acc:9909] | |
| RBMS3 | RNA binding motif, single stranded interacting protein 3 [Source:HGNC Symbol;Acc:13427] | |
| RBMXL1 | RNA binding motif protein, X-linked-like 1 [Source:HGNC Symbol;Acc:25073] | |

| | | |
|----------------|---|---|
| RBP3 | Retinol binding protein 3, interstitial [Source:HGNC Symbol;Acc:9921] | |
| RCAN2 | Regulator of calcineurin 2 [Source:HGNC Symbol;Acc:3041] | |
| RCAN3 | RCAN family member 3 [Source:HGNC Symbol;Acc:3042] | |
| RCBTB2 | Regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 2 [Source:HGNC Symbol;Acc:1914] | |
| RCE1 | RCE1 homolog, prenyl protein peptidase (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:13721] | |
| RCL1 | RNA terminal phosphate cyclase-like 1 [Source:HGNC Symbol;Acc:17687] | |
| RCN2 | Reticulocalbin 2, EF-hand calcium binding domain [Source:HGNC Symbol;Acc:9935] | |
| RCOR1 | REST corepressor 1 [Source:HGNC Symbol;Acc:17441] | |
| RCOR2 | REST corepressor 2 [Source:HGNC Symbol;Acc:27455] | |
| RCOR3 | REST corepressor 3 [Source:HGNC Symbol;Acc:25594] | |
| RDH16 | Retinol dehydrogenase 16 (all-trans) [Source:HGNC Symbol;Acc:29674] | |
| RECK | Reversion-inducing-cysteine-rich protein with kazal motifs [Source:HGNC Symbol;Acc:11345] | |
| RECQL | Recq protein-like (DNA helicase Q1-like) [Source:HGNC Symbol;Acc:9948] | |
| REEP3 | Receptor accessory protein 3 [Source:HGNC Symbol;Acc:23711] | |
| REEP4 | Receptor accessory protein 4 [Source:HGNC Symbol;Acc:26176] | |
| RENBP | Renin binding protein [Source:HGNC Symbol;Acc:9959] | |
| REPIN1 | Replication initiator 1 [Source:HGNC Symbol;Acc:17922] | |
| RET | Ret proto-oncogene | √ |
| RETSAT | Retinol saturase (all-trans-retinol 13,14-reductase) [Source:HGNC Symbol;Acc:25991] | |
| REV3L | REV3-like, catalytic subunit of DNA polymerase zeta (yeast) [Source:HGNC Symbol;Acc:9968] | |
| REXO1L1 | REX1, RNA exonuclease 1 homolog (<i>S. Cerevisiae</i>)-like 1 [Source:HGNC Symbol;Acc:24660] | |
| REXO4 | REX4, RNA exonuclease 4 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:12820] | |
| RFC1 | Replication factor C (activator 1) 1, 145kda [Source:HGNC Symbol;Acc:9969] | |

| | | |
|--------------|---|--|
| RFC2 | Replication factor C (activator 1) 2, 40kda [Source:HGNC Symbol;Acc:9970] | |
| RFC3 | Replication factor C (activator 1) 3, 38kda [Source:HGNC Symbol;Acc:9971] | |
| RFPL1 | Ret finger protein-like 1 [Source:HGNC Symbol;Acc:9977] | |
| RFT1 | RFT1 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:30220] | |
| RFTN1 | Raftlin, lipid raft linker 1 [Source:HGNC Symbol;Acc:30278] | |
| RFWD2 | Ring finger and WD repeat domain 2 [Source:HGNC Symbol;Acc:17440] | |
| RFX2 | Regulatory factor X, 2 (influences HLA class II expression) [Source:HGNC Symbol;Acc:9983] | |
| RFX3 | Regulatory factor X, 3 (influences HLA class II expression) [Source:HGNC Symbol;Acc:9984] | |
| RFX7 | Regulatory factor X, 7 [Source:HGNC Symbol;Acc:25777] | |
| RGAG1 | Retrotransposon gag domain containing 1 [Source:HGNC Symbol;Acc:29245] | |
| RGMA | RGM domain family, member A [Source:HGNC Symbol;Acc:30308] | |
| RGP1 | RGP1 retrograde golgi transport homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:21965] | |
| RGPD1 | RANBP2-like and GRIP domain containing 1 [Source:HGNC Symbol;Acc:32414] | |
| RGPD2 | RANBP2-like and GRIP domain containing 2 [Source:HGNC Symbol;Acc:32415] | |
| RGPD4 | RANBP2-like and GRIP domain containing 4 [Source:HGNC Symbol;Acc:32417] | |
| RGPD5 | RANBP2-like and GRIP domain containing 5 [Source:HGNC Symbol;Acc:32418] | |
| RGPD6 | RANBP2-like and GRIP domain containing 6 [Source:HGNC Symbol;Acc:32419] | |
| RGPD8 | RANBP2-like and GRIP domain containing 8 [Source:HGNC Symbol;Acc:9849] | |
| RGS12 | Regulator of G-protein signaling 12 [Source:HGNC Symbol;Acc:9994] | |
| RGS2 | Regulator of G-protein signaling 2, 24kda [Source:HGNC Symbol;Acc:9998] | |

| | | |
|----------------|--|--|
| RGS22 | Regulator of G-protein signaling 22 [Source:HGNC Symbol;Acc:24499] | |
| RGS3 | Regulator of G-protein signaling 3 [Source:HGNC Symbol;Acc:9999] | |
| RGS4 | Regulator of G-protein signaling 4 [Source:HGNC Symbol;Acc:10000] | |
| RGS5 | Regulator of G-protein signaling 5 [Source:HGNC Symbol;Acc:10001] | |
| RGS6 | Regulator of G-protein signaling 6 [Source:HGNC Symbol;Acc:10002] | |
| RGS7 | Regulator of G-protein signaling 7 [Source:HGNC Symbol;Acc:10003] | |
| RGS9BP | Regulator of G protein signaling 9 binding protein [Source:HGNC Symbol;Acc:30304] | |
| RHBDD1 | Rhomboid domain containing 1 [Source:HGNC Symbol;Acc:23081] | |
| RHBDD2 | Rhomboid domain containing 2 [Source:HGNC Symbol;Acc:23082] | |
| RHBDL3 | Rhomboid, veinlet-like 3 (Drosophila) [Source:HGNC Symbol;Acc:16502] | |
| RHCE | Rh blood group, ccee antigens [Source:HGNC Symbol;Acc:10008] | |
| RHD | Rh blood group, D antigen [Source:HGNC Symbol;Acc:10009] | |
| RHEB | Ras homolog enriched in brain [Source:HGNC Symbol;Acc:10011] | |
| RHO | Rhodopsin [Source:HGNC Symbol;Acc:10012] | |
| RHOBTB1 | Rho-related BTB domain containing 1 [Source:HGNC Symbol;Acc:18738] | |
| RHOBTB2 | Rho-related BTB domain containing 2 [Source:HGNC Symbol;Acc:18756] | |
| RHOH | Ras homolog gene family, member H [Source:HGNC Symbol;Acc:686] | |
| RHPN2 | Rhopilin, Rho gtpase binding protein 2 [Source:HGNC Symbol;Acc:19974] | |
| RIBC2 | RIB43A domain with coiled-coils 2 [Source:HGNC Symbol;Acc:13241] | |
| RIC3 | Resistance to inhibitors of cholinesterase 3 homolog (C. Elegans) [Source:HGNC Symbol;Acc:30338] | |
| RIC8A | Resistance to inhibitors of cholinesterase 8 homolog A (C. Elegans) [Source:HGNC Symbol;Acc:29550] | |
| RICTOR | RPTOR independent companion of MTOR, complex 2 [Source:HGNC Symbol;Acc:28611] | |
| RIF1 | RAP1 interacting factor homolog (yeast) [Source:HGNC Symbol;Acc:23207] | |
| RILPL2 | Rab interacting lysosomal protein-like 2 [Source:HGNC Symbol;Acc:28787] | |
| RIMBP2 | RIMS binding protein 2 [Source:HGNC Symbol;Acc:30339] | |
| RIMBP3 | RIMS binding protein 3 [Source:HGNC Symbol;Acc:29344] | |
| RIMS2 | Regulating synaptic membrane exocytosis 2 [Source:HGNC Symbol;Acc:17283] | |

| | | |
|-----------------|---|--|
| RIMS3 | Regulating synaptic membrane exocytosis 3 [Source:HGNC Symbol;Acc:21292] | |
| RIMS4 | Regulating synaptic membrane exocytosis 4 [Source:HGNC Symbol;Acc:16183] | |
| RIN2 | Ras and Rab interactor 2 [Source:HGNC Symbol;Acc:18750] | |
| RIN3 | Ras and Rab interactor 3 [Source:HGNC Symbol;Acc:18751] | |
| RIOK1 | RIO kinase 1 (yeast) [Source:HGNC Symbol;Acc:18656] | |
| RIPK2 | Receptor-interacting serine-threonine kinase 2 [Source:HGNC Symbol;Acc:10020] | |
| RIPK4 | Receptor-interacting serine-threonine kinase 4 [Source:HGNC Symbol;Acc:496] | |
| RLTPR | RGD motif, leucine rich repeats, tropomodulin domain and proline-rich containing [Source:HGNC Symbol;Acc:27089] | |
| RMND5A | Required for meiotic nuclear division 5 homolog A (S. Cerevisiae) [Source:HGNC Symbol;Acc:25850] | |
| RNASEH2C | Ribonuclease H2, subunit C [Source:HGNC Symbol;Acc:24116] | |
| RNASEL | Ribonuclease L (2',5'-oligoadenylate synthetase-dependent) [Source:HGNC Symbol;Acc:10050] | |
| RNASET2 | Ribonuclease T2 [Source:HGNC Symbol;Acc:21686] | |
| RND1 | Rho family gtpase 1 [Source:HGNC Symbol;Acc:18314] | |
| RND2 | Rho family gtpase 2 [Source:HGNC Symbol;Acc:18315] | |
| RNF11 | Ring finger protein 11 [Source:HGNC Symbol;Acc:10056] | |
| RNF111 | Ring finger protein 111 [Source:HGNC Symbol;Acc:17384] | |
| RNF114 | Ring finger protein 114 [Source:HGNC Symbol;Acc:13094] | |
| RNF121 | Ring finger protein 121 [Source:HGNC Symbol;Acc:21070] | |
| RNF123 | Ring finger protein 123 [Source:HGNC Symbol;Acc:21148] | |
| RNF125 | Ring finger protein 125 [Source:HGNC Symbol;Acc:21150] | |
| RNF128 | Ring finger protein 128 [Source:HGNC Symbol;Acc:21153] | |
| RNF133 | Ring finger protein 133 [Source:HGNC Symbol;Acc:21154] | |
| RNF141 | Ring finger protein 141 [Source:HGNC Symbol;Acc:21159] | |
| RNF144B | Ring finger protein 144B [Source:HGNC Symbol;Acc:21578] | |
| RNF145 | Ring finger protein 145 [Source:HGNC Symbol;Acc:20853] | |
| RNF152 | Ring finger protein 152 [Source:HGNC Symbol;Acc:26811] | |

| | | |
|---------------|---|--|
| RNF165 | Ring finger protein 165 [Source:HGNC Symbol;Acc:31696] | |
| RNF169 | Ring finger protein 169 [Source:HGNC Symbol;Acc:26961] | |
| RNF17 | Ring finger protein 17 [Source:HGNC Symbol;Acc:10060] | |
| RNF170 | Ring finger protein 170 [Source:HGNC Symbol;Acc:25358] | |
| RNF175 | Ring finger protein 175 [Source:HGNC Symbol;Acc:27735] | |
| RNF182 | Ring finger protein 182 [Source:HGNC Symbol;Acc:28522] | |
| RNF19A | Ring finger protein 19A [Source:HGNC Symbol;Acc:13432] | |
| RNF19B | Ring finger protein 19B [Source:HGNC Symbol;Acc:26886] | |
| RNF20 | Ring finger protein 20 [Source:HGNC Symbol;Acc:10062] | |
| RNF213 | Ring finger protein 213 [Source:HGNC Symbol;Acc:14539] | |
| RNF214 | Ring finger protein 214 [Source:HGNC Symbol;Acc:25335] | |
| RNF216 | Ring finger protein 216 [Source:HGNC Symbol;Acc:21698] | |
| RNF219 | Ring finger protein 219 [Source:HGNC Symbol;Acc:20308] | |
| RNF32 | Ring finger protein 32 [Source:HGNC Symbol;Acc:17118] | |
| RNF34 | Ring finger protein 34 [Source:HGNC Symbol;Acc:17297] | |
| RNF38 | Ring finger protein 38 [Source:HGNC Symbol;Acc:18052] | |
| RNF40 | Ring finger protein 40 [Source:HGNC Symbol;Acc:16867] | |
| RNF8 | Ring finger protein 8 [Source:HGNC Symbol;Acc:10071] | |
| RNFT2 | Ring finger protein, transmembrane 2 [Source:HGNC Symbol;Acc:25905] | |
| RNH1 | Ribonuclease/angiogenin inhibitor 1 [Source:HGNC Symbol;Acc:10074] | |
| RNMT | RNA (guanine-7-) methyltransferase [Source:HGNC Symbol;Acc:10075] | |
| RNMTL1 | RNA methyltransferase like 1 [Source:HGNC Symbol;Acc:18485] | |
| ROBO1 | Roundabout, axon guidance receptor, homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:10249] | |
| ROBO2 | Roundabout, axon guidance receptor, homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:10250] | |
| ROBO4 | Roundabout homolog 4, magic roundabout (Drosophila) [Source:HGNC Symbol;Acc:17985] | |
| ROD1 | ROD1 regulator of differentiation 1 (S. Pombe) [Source:HGNC Symbol;Acc:10253] | |
| ROPN1L | Rhophilin associated tail protein 1-like [Source:HGNC Symbol;Acc:24060] | |
| ROR2 | Receptor tyrosine kinase-like orphan receptor 2 [Source:HGNC Symbol;Acc:10257] | |

| | | |
|------------------------|--|---|
| ROS1 | C-ros oncogene 1 , receptor tyrosine kinase | √ |
| RP1 | Retinitis pigmentosa 1 (autosomal dominant) | |
| RP11-1286E23.8 | Ubiquitin carboxyl-terminal hydrolase 17 [Source:uniprotkb/Swiss-Prot;Acc:Q0WX57] | |
| RP11-1396O13.11 | | |
| RP11-1396O13.4 | | |
| RP11-1396O13.5 | | |
| RP11-1396O13.7 | | |
| RP11-1396O13.8 | | |
| RP11-1396O13.9 | | |
| RP11-15K19.2 | 28S ribosomal protein S17, mitochondrial [Source:uniprotkb/Swiss-Prot;Acc:Q9Y2R5] | |
| RP11-261P9.5 | Syntaxin 16 isoform a variant [Source:uniprotkb/trembl;Acc:Q59G13] | |
| RP11-352D3.2 | Novel proteinuncharacterized protein [Source:uniprotkb/trembl;Acc:Q5VXX5] | |
| RP11-389E17.1 | HCG2025867Uncharacterized protein [Source:uniprotkb/trembl;Acc:C9JJG8] | |
| RP11-392O18.1 | Selenoprotein T [Source:uniprotkb/Swiss-Prot;Acc:P62341] | |
| RP11-428C6.1 | Rho-guanine nucleotide exchange factor [Source:uniprotkb/Swiss-Prot;Acc:Q8N1W1] | |
| RP11-468E2.1 | Transmembrane 9 superfamily member 1 isoform a [Source:refseq peptide;Acc:NP_006396] | |
| RP11-476E15.3 | Novel protein (KIAA0894)Sorbin and SH3 domain containing 1, isoform CRA_e [Source:uniprotkb/trembl;Acc:Q5T925] | |
| RP11-631M21.2 | Tubulin beta-8 chain [Source:uniprotkb/Swiss-Prot;Acc:Q3ZCM7] | |

| | | |
|------------------------|--|--|
| RP11-723O4.6 | Uncharacterized protein FLJ43738 [Source:uniprotkb/Swiss-Prot;Acc:Q6ZUG5] | |
| RP1-177G6.2 | Novel protein [Source:uniprotkb/trembl;Acc:Q5JPA2] | |
| RP11-783K16.10 | Potassium channel subfamily K member 4 [Source:refseq peptide;Acc:NP_201567] | |
| RP11-88G17.6 | Novel protein similar to hemicentin (LOC392395) [Source:uniprotkb/trembl;Acc:A2A3K3] | |
| RP13-347D8.6 | Uncharacterized protein KIAA1210 [Source:uniprotkb/Swiss-Prot;Acc:Q9ULL0] | |
| RP3-377D14.1 | Novel protein [Source:uniprotkb/trembl;Acc:A2BGT5] | |
| RP3-402G11.5 | Selenoprotein O [Source:uniprotkb/Swiss-Prot;Acc:Q9BVL4] | |
| RP3-403A15.5 | C6orf174 protein [Source:uniprotkb/trembl;Acc:A5PLQ8] | |
| RP4-695O20_B.10 | Microrna let-7b (MIRLET7B), microrna [Source:refseq DNA;Acc:NR_029479] | |
| RP4-697K14.7 | Peroxisomal proliferator-activated receptor A-interacting complex 285 kda protein [Source:uniprotkb/Swiss-Prot;Acc:Q9BYK8] | |
| RP4-788L13.1 | Lipid phosphate phosphatase-related protein type 4 [Source:uniprotkb/Swiss-Prot;Acc:Q7Z2D5] | |
| RP5-860F19.6 | Uncharacterized protein [Source:uniprotkb/trembl;Acc:D6RAZ5] | |
| RP5-862P8.2 | Mitogen-activated protein kinase kinase kinase MLK4 [Source:uniprotkb/Swiss-Prot;Acc:Q5TCX8] | |
| RP5-877J2.1 | Cdna FLJ51453, highly similar to Aquaporin-1 [Source:uniprotkb/trembl;Acc:B4E220] | |
| RPAP1 | RNA polymerase II associated protein 1 [Source:HGNC Symbol;Acc:24567] | |
| RPGRIP1 | Retinitis pigmentosa gtpase regulator interacting protein 1 [Source:HGNC Symbol;Acc:13436] | |
| RPGRIP1L | RPGRIP1-like [Source:HGNC Symbol;Acc:29168] | |
| RPL13 | Ribosomal protein L13 [Source:HGNC Symbol;Acc:10303] | |
| RPL13A | Ribosomal protein L13a [Source:HGNC Symbol;Acc:10304] | |
| RPL3 | Ribosomal protein L3 [Source:HGNC Symbol;Acc:10332] | |
| RPL31 | Ribosomal protein L31 [Source:HGNC Symbol;Acc:10334] | |
| RPL7L1 | Ribosomal protein L7-like 1 [Source:HGNC Symbol;Acc:21370] | |

| | | |
|----------------|---|---|
| RPN1 | Ribophorin I | √ |
| RPN2 | Ribophorin II [Source:HGNC Symbol;Acc:10382] | |
| RPP14 | Ribonuclease P/MRP 14kda subunit [Source:HGNC Symbol;Acc:30327] | |
| RPRD1A | Regulation of nuclear pre-mrna domain containing 1A [Source:HGNC Symbol;Acc:25560] | |
| RPRD1B | Regulation of nuclear pre-mrna domain containing 1B [Source:HGNC Symbol;Acc:16209] | |
| RPS21 | Ribosomal protein S21 [Source:HGNC Symbol;Acc:10409] | |
| RPS27A | Ribosomal protein S27a [Source:HGNC Symbol;Acc:10417] | |
| RPS6 | Ribosomal protein S6 [Source:HGNC Symbol;Acc:10429] | |
| RPS6KA3 | Ribosomal protein S6 kinase, 90kda, polypeptide 3 [Source:HGNC Symbol;Acc:10432] | |
| RPS6KA4 | Ribosomal protein S6 kinase, 90kda, polypeptide 4 [Source:HGNC Symbol;Acc:10433] | |
| RPS6KA5 | Ribosomal protein S6 kinase, 90kda, polypeptide 5 [Source:HGNC Symbol;Acc:10434] | |
| RPS6KB1 | Ribosomal protein S6 kinase, 70kda, polypeptide 1 [Source:HGNC Symbol;Acc:10436] | |
| RPS6KL1 | Ribosomal protein S6 kinase-like 1 [Source:HGNC Symbol;Acc:20222] | |
| RPS7 | Ribosomal protein S7 [Source:HGNC Symbol;Acc:10440] | |
| RPS8 | Ribosomal protein S8 [Source:HGNC Symbol;Acc:10441] | |
| RRAGB | Ras-related GTP binding B [Source:HGNC Symbol;Acc:19901] | |
| RRBP1 | Ribosome binding protein 1 homolog 180kda (dog) [Source:HGNC Symbol;Acc:10448] | |
| RREB1 | Ras responsive element binding protein 1 [Source:HGNC Symbol;Acc:10449] | |
| RRH | Retinal pigment epithelium-derived rhodopsin homolog [Source:HGNC Symbol;Acc:10450] | |
| RRM2B | Ribonucleotide reductase M2 B (TP53 inducible) [Source:HGNC Symbol;Acc:17296] | |
| RRP15 | Ribosomal RNA processing 15 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:24255] | |

| | | |
|-----------------|--|--|
| RRP8 | Ribosomal RNA processing 8, methyltransferase, homolog (yeast) [Source:HGNC Symbol;Acc:29030] | |
| RRP9 | Ribosomal RNA processing 9, small subunit (SSU) processome component, homolog (yeast) [Source:HGNC Symbol;Acc:16829] | |
| RS1 | Retinoschisin 1 [Source:HGNC Symbol;Acc:10457] | |
| RSC1A1 | Regulatory solute carrier protein, family 1, member 1 [Source:HGNC Symbol;Acc:10458] | |
| RSF1 | Remodeling and spacing factor 1 [Source:HGNC Symbol;Acc:18118] | |
| RSPH10B2 | Radial spoke head 10 homolog B2 (Chlamydomonas) [Source:HGNC Symbol;Acc:34385] | |
| RSPH9 | Radial spoke head 9 homolog (Chlamydomonas) [Source:HGNC Symbol;Acc:21057] | |
| RSPRY1 | Ring finger and SPRY domain containing 1 [Source:HGNC Symbol;Acc:29420] | |
| RSRC2 | Arginine/serine-rich coiled-coil 2 [Source:HGNC Symbol;Acc:30559] | |
| RSU1 | Ras suppressor protein 1 [Source:HGNC Symbol;Acc:10464] | |
| RTCD1 | RNA terminal phosphate cyclase domain 1 [Source:HGNC Symbol;Acc:17981] | |
| RTEL1 | Regulator of telomere elongation helicase 1 [Source:HGNC Symbol;Acc:15888] | |
| RTF1 | Rtf1, Paf1/RNA polymerase II complex component, homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:28996] | |
| RTKN | Rhotekin [Source:HGNC Symbol;Acc:10466] | |
| RTKN2 | Rhotekin 2 [Source:HGNC Symbol;Acc:19364] | |
| RTN1 | Reticulon 1 [Source:HGNC Symbol;Acc:10467] | |
| RTN4 | Reticulon 4 [Source:HGNC Symbol;Acc:14085] | |
| RTN4R | Reticulon 4 receptor [Source:HGNC Symbol;Acc:18601] | |
| RTN4RL1 | Reticulon 4 receptor-like 1 [Source:HGNC Symbol;Acc:21329] | |
| RTP4 | Receptor (chemosensory) transporter protein 4 [Source:HGNC Symbol;Acc:23992] | |
| RUFY3 | RUN and FYVE domain containing 3 [Source:HGNC Symbol;Acc:30285] | |
| RUNX1T1 | Runt-related transcription factor 1; translocated to, 1 (cyclin D-related) [Source:HGNC Symbol;Acc:1535] | |

| | | |
|----------------|---|--|
| RUSC1 | RUN and SH3 domain containing 1 [Source:HGNC Symbol;Acc:17153] | |
| RUSC2 | RUN and SH3 domain containing 2 [Source:HGNC Symbol;Acc:23625] | |
| RWDD2B | RWD domain containing 2B [Source:HGNC Symbol;Acc:1302] | |
| RWDD3 | RWD domain containing 3 [Source:HGNC Symbol;Acc:21393] | |
| RWDD4 | RWD domain containing 4 [Source:HGNC Symbol;Acc:23750] | |
| RXFP1 | Relaxin/insulin-like family peptide receptor 1 [Source:HGNC Symbol;Acc:19718] | |
| RXFP2 | Relaxin/insulin-like family peptide receptor 2 [Source:HGNC Symbol;Acc:17318] | |
| RXFP3 | Relaxin/insulin-like family peptide receptor 3 [Source:HGNC Symbol;Acc:24883] | |
| RXRA | Retinoid X receptor, alpha [Source:HGNC Symbol;Acc:10477] | |
| RXRB | Retinoid X receptor, beta [Source:HGNC Symbol;Acc:10478] | |
| RYR1 | Ryanodine receptor 1 (skeletal) [Source:HGNC Symbol;Acc:10483] | |
| RYR2 | Ryanodine receptor 2 (cardiac) [Source:HGNC Symbol;Acc:10484] | |
| RYR3 | Ryanodine receptor 3 [Source:HGNC Symbol;Acc:10485] | |
| S100A1 | S100 calcium binding protein A1 [Source:HGNC Symbol;Acc:10486] | |
| S100A2 | S100 calcium binding protein A2 [Source:HGNC Symbol;Acc:10492] | |
| S100A7A | S100 calcium binding protein A7A [Source:HGNC Symbol;Acc:21657] | |
| S100BP | S100P binding protein [Source:HGNC Symbol;Acc:25768] | |
| S1PR3 | Sphingosine-1-phosphate receptor 3 [Source:HGNC Symbol;Acc:3167] | |
| S1PR5 | Sphingosine-1-phosphate receptor 5 [Source:HGNC Symbol;Acc:14299] | |
| SACS | Spastic ataxia of Charlevoix-Saguenay (sacsin) [Source:HGNC Symbol;Acc:10519] | |
| SAE1 | SUMO1 activating enzyme subunit 1 [Source:HGNC Symbol;Acc:30660] | |
| SAGE1 | Sarcoma antigen 1 [Source:HGNC Symbol;Acc:30369] | |
| SALL4 | Sal-like 4 (Drosophila) [Source:HGNC Symbol;Acc:15924] | |
| SAMD10 | Sterile alpha motif domain containing 10 [Source:HGNC Symbol;Acc:16129] | |
| SAMD14 | Sterile alpha motif domain containing 14 [Source:HGNC Symbol;Acc:27312] | |
| SAMD4A | Sterile alpha motif domain containing 4A [Source:HGNC Symbol;Acc:23023] | |

| | | |
|----------------|--|---|
| SAMD5 | Sterile alpha motif domain containing 5 [Source:HGNC Symbol;Acc:21180] | |
| SAMD7 | Sterile alpha motif domain containing 7 [Source:HGNC Symbol;Acc:25394] | |
| SAMD9L | Sterile alpha motif domain containing 9-like [Source:HGNC Symbol;Acc:1349] | |
| SAMM50 | Sorting and assembly machinery component 50 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:24276] | |
| SAP130 | Sin3A-associated protein, 130kda [Source:HGNC Symbol;Acc:29813] | |
| SAP30BP | SAP30 binding protein [Source:HGNC Symbol;Acc:30785] | |
| SAP30L | SAP30-like [Source:HGNC Symbol;Acc:25663] | |
| SAR1A | SAR1 homolog A (S. Cerevisiae) [Source:HGNC Symbol;Acc:10534] | |
| SAR1B | SAR1 homolog B (S. Cerevisiae) [Source:HGNC Symbol;Acc:10535] | |
| SARNP | SAP domain containing ribonucleoprotein [Source:HGNC Symbol;Acc:24432] | |
| SASH1 | SAM and SH3 domain containing 1 [Source:HGNC Symbol;Acc:19182] | |
| SATB1 | SATB homeobox 1 [Source:HGNC Symbol;Acc:10541] | |
| SATB2 | SATB homeobox 2 [Source:HGNC Symbol;Acc:21637] | |
| SBDS | Shwachman-Bodian-Diamond syndrome | √ |
| SBNO1 | Strawberry notch homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:22973] | |
| SC4MOL | Sterol-C4-methyl oxidase-like [Source:HGNC Symbol;Acc:10545] | |
| SCAF8 | SR-related CTD-associated factor 8 [Source:HGNC Symbol;Acc:20959] | |
| SCAMP4 | Secretory carrier membrane protein 4 [Source:HGNC Symbol;Acc:30385] | |
| SCAMP5 | Secretory carrier membrane protein 5 [Source:HGNC Symbol;Acc:30386] | |
| SCAND3 | SCAN domain containing 3 [Source:HGNC Symbol;Acc:13851] | |
| SCAP | SREBF chaperone [Source:HGNC Symbol;Acc:30634] | |
| SCAPER | S-phase cyclin A-associated protein in the ER [Source:HGNC Symbol;Acc:13081] | |
| SCARB2 | Scavenger receptor class B, member 2 [Source:HGNC Symbol;Acc:1665] | |
| SCD | Stearoyl-coa desaturase (delta-9-desaturase) [Source:HGNC Symbol;Acc:10571] | |
| SCEL | Sciellin [Source:HGNC Symbol;Acc:10573] | |
| SCG2 | Secretogranin II [Source:HGNC Symbol;Acc:10575] | |
| SCIN | Scinderin [Source:HGNC Symbol;Acc:21695] | |

| | | |
|---------------|--|---|
| SCMH1 | Sex comb on midleg homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:19003] | |
| SCML1 | Sex comb on midleg-like 1 (Drosophila) [Source:HGNC Symbol;Acc:10580] | |
| SCML2 | Sex comb on midleg-like 2 (Drosophila) [Source:HGNC Symbol;Acc:10581] | |
| SCML4 | Sex comb on midleg-like 4 (Drosophila) [Source:HGNC Symbol;Acc:21397] | |
| SCN10A | Sodium channel, voltage-gated, type X, alpha subunit [Source:HGNC Symbol;Acc:10582] | |
| SCN2A | Sodium channel, voltage-gated, type II, alpha subunit [Source:HGNC Symbol;Acc:10588] | |
| SCN3B | Sodium channel, voltage-gated, type III, beta [Source:HGNC Symbol;Acc:20665] | |
| SCN4A | Sodium channel, voltage-gated, type IV, alpha subunit [Source:HGNC Symbol;Acc:10591] | |
| SCN5A | Sodium channel, voltage-gated, type V, alpha subunit [Source:HGNC Symbol;Acc:10593] | |
| SCN8A | Sodium channel, voltage gated, type VIII, alpha subunit [Source:HGNC Symbol;Acc:10596] | |
| SCP2 | Sterol carrier protein 2 [Source:HGNC Symbol;Acc:10606] | |
| SCRG1 | Stimulator of chondrogenesis 1 [Source:HGNC Symbol;Acc:17036] | |
| SCRN1 | Secernin 1 [Source:HGNC Symbol;Acc:22192] | |
| SCUBE1 | Signal peptide, CUB domain, EGF-like 1 [Source:HGNC Symbol;Acc:13441] | |
| SCUBE2 | Signal peptide, CUB domain, EGF-like 2 [Source:HGNC Symbol;Acc:30425] | |
| SCUBE3 | Signal peptide, CUB domain, EGF-like 3 [Source:HGNC Symbol;Acc:13655] | |
| SDAD1 | SDA1 domain containing 1 [Source:HGNC Symbol;Acc:25537] | |
| SDC3 | Syndecan 3 [Source:HGNC Symbol;Acc:10660] | |
| SDC4 | Syndecan 4 | √ |
| SDCBP2 | Syndecan binding protein (syntenin) 2 [Source:HGNC Symbol;Acc:15756] | |

| | | |
|-----------------|---|---|
| SDCCAG3 | Serologically defined colon cancer antigen 3 [Source:HGNC Symbol;Acc:10667] | |
| SDHAF2 | Succinate dehydrogenase complex assembly factor 2 [Source:HGNC Symbol;Acc:26034] | |
| SDHD | Succinate dehydrogenase complex, subunit D, integral membrane protein | √ |
| SDK1 | Sidekick homolog 1, cell adhesion molecule (chicken) [Source:HGNC Symbol;Acc:19307] | |
| SDK2 | Sidekick homolog 2 (chicken) [Source:HGNC Symbol;Acc:19308] | |
| SDR16C5 | Short chain dehydrogenase/reductase family 16C, member 5 [Source:HGNC Symbol;Acc:30311] | |
| SEC14L4 | SEC14-like 4 (<i>S. Cerevisiae</i>) | |
| SEC14L5 | SEC14-like 5 (<i>S. Cerevisiae</i>) | |
| SEC16A | SEC16 homolog A (<i>S. Cerevisiae</i>) | |
| SEC22A | SEC22 vesicle trafficking protein homolog A (<i>S. Cerevisiae</i>) | |
| SEC23A | Sec23 homolog A (<i>S. Cerevisiae</i>) | |
| SEC23B | Sec23 homolog B (<i>S. Cerevisiae</i>) | |
| SEC23IP | SEC23 interacting protein [Source:HGNC Symbol;Acc:17018] | |
| SEC24B | SEC24 family, member B (<i>S. Cerevisiae</i>) | |
| SEC24C | SEC24 family, member C (<i>S. Cerevisiae</i>) | |
| SEC24D | SEC24 family, member D (<i>S. Cerevisiae</i>) | |
| SEC31A | SEC31 homolog A (<i>S. Cerevisiae</i>) | |
| SEC61A2 | Sec61 alpha 2 subunit (<i>S. Cerevisiae</i>) | |
| SEC63 | SEC63 homolog (<i>S. Cerevisiae</i>) | |
| SECISBP2 | SECIS binding protein 2 | |
| SEH1L | SEH1-like (<i>S. Cerevisiae</i>) | |
| SEL1L | Sel-1 suppressor of lin-12-like (<i>C. Elegans</i>) | |
| SEL1L3 | Sel-1 suppressor of lin-12-like 3 (<i>C. Elegans</i>) | |
| SELE | Selectin E | |
| SELENBP1 | Selenium binding protein 1 [Source:HGNC Symbol;Acc:10719] | |
| SELL | Selectin L [Source:HGNC Symbol;Acc:10720] | |
| SEMA3A | Sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (Semaphorin) 3A [Source:HGNC Symbol;Acc:10723] | |

| | | |
|----------------|--|--|
| SEMA3C | Sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (Semaphorin) 3C [Source:HGNC Symbol;Acc:10725] | |
| SEMA4A | Sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (Semaphorin) 4A [Source:HGNC Symbol;Acc:10729] | |
| SEMA4B | Sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (Semaphorin) 4B [Source:HGNC Symbol;Acc:10730] | |
| SEMA4C | Sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (Semaphorin) 4C [Source:HGNC Symbol;Acc:10731] | |
| SEMA4D | Sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (Semaphorin) 4D [Source:HGNC Symbol;Acc:10732] | |
| SEMA4F | Sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (Semaphorin) 4F [Source:HGNC Symbol;Acc:10734] | |
| SEMA5A | Sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (Semaphorin) 5A [Source:HGNC Symbol;Acc:10736] | |
| SEMA6A | Sema domain, transmembrane domain (TM), and cytoplasmic domain, (Semaphorin) 6A [Source:HGNC Symbol;Acc:10738] | |
| SEMG2 | Semenogelin II [Source:HGNC Symbol;Acc:10743] | |
| SENP5 | SUMO1/sentrin specific peptidase 5 [Source:HGNC Symbol;Acc:28407] | |
| SENP6 | SUMO1/sentrin specific peptidase 6 [Source:HGNC Symbol;Acc:20944] | |
| SENP7 | SUMO1/sentrin specific peptidase 7 [Source:HGNC Symbol;Acc:30402] | |
| SENP8 | SUMO/sentrin specific peptidase family member 8 [Source:HGNC Symbol;Acc:22992] | |
| SEPHS1 | Selenophosphate synthetase 1 [Source:HGNC Symbol;Acc:19685] | |
| SEPN1 | Selenoprotein N, 1 [Source:HGNC Symbol;Acc:15999] | |
| SEPSECS | Sep (O-phosphoserine) trna:Sec (selenocysteine) trna synthase [Source:HGNC Symbol;Acc:30605] | |
| SERBP1 | SERPINE1 mrna binding protein 1 [Source:HGNC Symbol;Acc:17860] | |

| | | |
|------------------|---|---|
| SERHL2 | Serine hydrolase-like 2 [Source:HGNC Symbol;Acc:29446] | |
| SERINC1 | Serine incorporator 1 [Source:HGNC Symbol;Acc:13464] | |
| SERPINA10 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 10 [Source:HGNC Symbol;Acc:15996] | |
| SERPINA5 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 5 [Source:HGNC Symbol;Acc:8723] | |
| SERPINA7 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 7 [Source:HGNC Symbol;Acc:11583] | |
| SERPINA9 | Serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 9 [Source:HGNC Symbol;Acc:15995] | |
| SERPINB1 | Serpin peptidase inhibitor, clade B (ovalbumin), member 1 [Source:HGNC Symbol;Acc:3311] | |
| SERPINB2 | Serpin peptidase inhibitor, clade B (ovalbumin), member 2 [Source:HGNC Symbol;Acc:8584] | |
| SERPINB5 | Serpin peptidase inhibitor, clade B (ovalbumin), member 5 [Source:HGNC Symbol;Acc:8949] | |
| SERPINB9 | Serpin peptidase inhibitor, clade B (ovalbumin), member 9 [Source:HGNC Symbol;Acc:8955] | |
| SERPINE1 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1 [Source:HGNC Symbol;Acc:8583] | |
| SERPINE2 | Serpin peptidase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 2 [Source:HGNC Symbol;Acc:8951] | |
| SERTAD2 | SERTA domain containing 2 [Source:HGNC Symbol;Acc:30784] | |
| SERTAD4 | SERTA domain containing 4 [Source:HGNC Symbol;Acc:25236] | |
| SESTD1 | SEC14 and spectrin domains 1 [Source:HGNC Symbol;Acc:18379] | |
| SETBP1 | SET binding protein 1 | √ |
| SETD1B | SET domain containing 1B [Source:HGNC Symbol;Acc:29187] | |
| SETD2 | SET domain containing 2 | √ |
| SETD5 | SET domain containing 5 [Source:HGNC Symbol;Acc:25566] | |
| SETD7 | SET domain containing (lysine methyltransferase) 7 [Source:HGNC Symbol;Acc:30412] | |
| SETMAR | SET domain and mariner transposase fusion gene [Source:HGNC Symbol;Acc:10762] | |

| | | |
|---------------|--|---|
| SETX | Senataxin [Source:HGNC Symbol;Acc:445] | |
| SEZ6 | Seizure related 6 homolog (mouse) [Source:HGNC Symbol;Acc:15955] | |
| SF3A1 | Splicing factor 3a, subunit 1, 120kda [Source:HGNC Symbol;Acc:10765] | |
| SF3A3 | Splicing factor 3a, subunit 3, 60kda [Source:HGNC Symbol;Acc:10767] | |
| SF3B1 | Splicing factor 3b, subunit 1, 155 kDa | √ |
| SF3B4 | Splicing factor 3b, subunit 4, 49kda [Source:HGNC Symbol;Acc:10771] | |
| SFI1 | Sfi1 homolog, spindle assembly associated (yeast) [Source:HGNC Symbol;Acc:29064] | |
| SFMBT2 | Scm-like with four mbt domains 2 [Source:HGNC Symbol;Acc:20256] | |
| SFN | Stratifin [Source:HGNC Symbol;Acc:10773] | |
| SFPQ | Splicing factor proline/glutamine-rich | √ |
| SFRP2 | Secreted frizzled-related protein 2 [Source:HGNC Symbol;Acc:10777] | |
| SFRP4 | Secreted frizzled-related protein 4 [Source:HGNC Symbol;Acc:10778] | |
| SFRS18 | Splicing factor, arginine/serine-rich 18 [Source:HGNC Symbol;Acc:21222] | |
| SFTPB | Surfactant protein B [Source:HGNC Symbol;Acc:10801] | |
| SFTPC | Surfactant protein C [Source:HGNC Symbol;Acc:10802] | |
| SFXN3 | Sideroflexin 3 [Source:HGNC Symbol;Acc:16087] | |
| SGCD | Sarcoglycan, delta (35kda dystrophin-associated glycoprotein) [Source:HGNC Symbol;Acc:10807] | |
| SGIP1 | SH3-domain GRB2-like (endophilin) interacting protein 1 [Source:HGNC Symbol;Acc:25412] | |
| SGK1 | Serum/glucocorticoid regulated kinase 1 [Source:HGNC Symbol;Acc:10810] | |
| SGK2 | Serum/glucocorticoid regulated kinase 2 [Source:HGNC Symbol;Acc:13900] | |
| SGMS1 | Sphingomyelin synthase 1 [Source:HGNC Symbol;Acc:29799] | |
| SGOL2 | Shugoshin-like 2 (S. Pombe) [Source:HGNC Symbol;Acc:30812] | |
| SGSM1 | Small G protein signaling modulator 1 [Source:HGNC Symbol;Acc:29410] | |
| SGSM3 | Small G protein signaling modulator 3 [Source:HGNC Symbol;Acc:25228] | |
| SGTA | Small glutamine-rich tetratricopeptide repeat (TPR)-containing, alpha [Source:HGNC Symbol;Acc:10819] | |
| SH2D1A | SH2 domain containing 1A [Source:HGNC Symbol;Acc:10820] | |
| SH2D3C | SH2 domain containing 3C [Source:HGNC Symbol;Acc:16884] | |

| | | |
|-----------------|--|--|
| SH3BP2 | SH3-domain binding protein 2 [Source:HGNC Symbol;Acc:10825] | |
| SH3D19 | SH3 domain containing 19 [Source:HGNC Symbol;Acc:30418] | |
| SH3D21 | SH3 domain containing 21 [Source:HGNC Symbol;Acc:26236] | |
| SH3GLB1 | SH3-domain GRB2-like endophilin B1 [Source:HGNC Symbol;Acc:10833] | |
| SH3KBP1 | SH3-domain kinase binding protein 1 [Source:HGNC Symbol;Acc:13867] | |
| SH3PXD2A | SH3 and PX domains 2A [Source:HGNC Symbol;Acc:23664] | |
| SH3PXD2B | SH3 and PX domains 2B [Source:HGNC Symbol;Acc:29242] | |
| SH3TC2 | SH3 domain and tetratricopeptide repeats 2 [Source:HGNC Symbol;Acc:29427] | |
| SHANK1 | SH3 and multiple ankyrin repeat domains 1 [Source:HGNC Symbol;Acc:15474] | |
| SHARPIN | SHANK-associated RH domain interactor [Source:HGNC Symbol;Acc:25321] | |
| SHC2 | SHC (Src homology 2 domain containing) transforming protein 2 [Source:HGNC Symbol;Acc:29869] | |
| SHE | Src homology 2 domain containing E [Source:HGNC Symbol;Acc:27004] | |
| SHF | Src homology 2 domain containing F [Source:HGNC Symbol;Acc:25116] | |
| SHH | Sonic hedgehog [Source:HGNC Symbol;Acc:10848] | |
| SHOC2 | Soc-2 suppressor of clear homolog (C. Elegans) [Source:HGNC Symbol;Acc:15454] | |
| SHPRH | SNF2 histone linker PHD RING helicase [Source:HGNC Symbol;Acc:19336] | |
| SHQ1 | SHQ1 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:25543] | |
| SHROOM2 | Shroom family member 2 [Source:HGNC Symbol;Acc:630] | |
| SHROOM4 | Shroom family member 4 [Source:HGNC Symbol;Acc:29215] | |
| SIAE | Sialic acid acetyltransferase [Source:HGNC Symbol;Acc:18187] | |
| SIAH2 | Seven in absentia homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:10858] | |
| SIDT1 | SID1 transmembrane family, member 1 [Source:HGNC Symbol;Acc:25967] | |
| SIDT2 | SID1 transmembrane family, member 2 [Source:HGNC Symbol;Acc:24272] | |
| SIGLEC1 | Sialic acid binding Ig-like lectin 1, sialoadhesin [Source:HGNC Symbol;Acc:11127] | |
| SIGLEC9 | Sialic acid binding Ig-like lectin 9 [Source:HGNC Symbol;Acc:10878] | |

| | | |
|----------------|---|--|
| SIK1 | Salt-inducible kinase 1 [Source:HGNC Symbol;Acc:11142] | |
| SIK3 | SIK family kinase 3 [Source:HGNC Symbol;Acc:29165] | |
| SIKE1 | Suppressor of IKBKE 1 [Source:HGNC Symbol;Acc:26119] | |
| SIL1 | SIL1 homolog, endoplasmic reticulum chaperone (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:24624] | |
| SIM1 | Single-minded homolog 1 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:10882] | |
| SIM2 | Single-minded homolog 2 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:10883] | |
| SIN3A | SIN3 homolog A, transcription regulator (yeast) [Source:HGNC Symbol;Acc:19353] | |
| SIPA1 | Signal-induced proliferation-associated 1 [Source:HGNC Symbol;Acc:10885] | |
| SIPA1L1 | Signal-induced proliferation-associated 1 like 1 [Source:HGNC Symbol;Acc:20284] | |
| SIPA1L2 | Signal-induced proliferation-associated 1 like 2 [Source:HGNC Symbol;Acc:23800] | |
| SIPA1L3 | Signal-induced proliferation-associated 1 like 3 [Source:HGNC Symbol;Acc:23801] | |
| SIRPB1 | Signal-regulatory protein beta 1 [Source:HGNC Symbol;Acc:15928] | |
| SIRPD | Signal-regulatory protein delta [Source:HGNC Symbol;Acc:16248] | |
| SIRT5 | Sirtuin 5 [Source:HGNC Symbol;Acc:14933] | |
| SIT1 | Signaling threshold regulating transmembrane adaptor 1 [Source:HGNC Symbol;Acc:17710] | |
| SIVA1 | SIVA1, apoptosis-inducing factor [Source:HGNC Symbol;Acc:17712] | |
| SIX3 | SIX homeobox 3 [Source:HGNC Symbol;Acc:10889] | |
| SIX4 | SIX homeobox 4 [Source:HGNC Symbol;Acc:10890] | |
| SIX6 | SIX homeobox 6 [Source:HGNC Symbol;Acc:10892] | |
| SKA2 | Spindle and kinetochore associated complex subunit 2 [Source:HGNC Symbol;Acc:28006] | |
| SKAP2 | Src kinase associated phosphoprotein 2 [Source:HGNC Symbol;Acc:15687] | |
| SKIV2L | Superkiller viralicidic activity 2-like (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:10898] | |

| | | |
|-----------------|---|--|
| SKIV2L2 | Superkiller viralicidic activity 2-like 2 (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:18734] | |
| SKP1 | S-phase kinase-associated protein 1 [Source:HGNC Symbol;Acc:10899] | |
| SLAIN2 | SLAIN motif family, member 2 [Source:HGNC Symbol;Acc:29282] | |
| SLAMF1 | Signaling lymphocytic activation molecule family member 1 [Source:HGNC Symbol;Acc:10903] | |
| SLC10A3 | Solute carrier family 10 (sodium/bile acid cotransporter family), member 3 [Source:HGNC Symbol;Acc:22979] | |
| SLC10A5 | Solute carrier family 10 (sodium/bile acid cotransporter family), member 5 [Source:HGNC Symbol;Acc:22981] | |
| SLC10A7 | Solute carrier family 10 (sodium/bile acid cotransporter family), member 7 [Source:HGNC Symbol;Acc:23088] | |
| SLC12A4 | Solute carrier family 12 (potassium/chloride transporters), member 4 [Source:HGNC Symbol;Acc:10913] | |
| SLC12A5 | Solute carrier family 12 (potassium/chloride transporter), member 5 [Source:HGNC Symbol;Acc:13818] | |
| SLC12A6 | Solute carrier family 12 (potassium/chloride transporters), member 6 [Source:HGNC Symbol;Acc:10914] | |
| SLC15A1 | Solute carrier family 15 (oligopeptide transporter), member 1 [Source:HGNC Symbol;Acc:10920] | |
| SLC15A3 | Solute carrier family 15, member 3 [Source:HGNC Symbol;Acc:18068] | |
| SLC16A1 | Solute carrier family 16, member 1 (monocarboxylic acid transporter 1) [Source:HGNC Symbol;Acc:10922] | |
| SLC16A12 | Solute carrier family 16, member 12 (monocarboxylic acid transporter 12) [Source:HGNC Symbol;Acc:23094] | |
| SLC16A14 | Solute carrier family 16, member 14 (monocarboxylic acid transporter 14) [Source:HGNC Symbol;Acc:26417] | |
| SLC16A3 | Solute carrier family 16, member 3 (monocarboxylic acid transporter 4) [Source:HGNC Symbol;Acc:10924] | |
| SLC16A5 | Solute carrier family 16, member 5 (monocarboxylic acid transporter 6) [Source:HGNC Symbol;Acc:10926] | |
| SLC16A6 | Solute carrier family 16, member 6 (monocarboxylic acid transporter 7) [Source:HGNC Symbol;Acc:10927] | |

| | | |
|-----------------|---|--|
| SLC16A7 | Solute carrier family 16, member 7 (monocarboxylic acid transporter 2) [Source:HGNC Symbol;Acc:10928] | |
| SLC16A8 | Solute carrier family 16, member 8 (monocarboxylic acid transporter 3) [Source:HGNC Symbol;Acc:16270] | |
| SLC17A6 | Solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 6 [Source:HGNC Symbol;Acc:16703] | |
| SLC17A8 | Solute carrier family 17 (sodium-dependent inorganic phosphate cotransporter), member 8 [Source:HGNC Symbol;Acc:20151] | |
| SLC18A1 | Solute carrier family 18 (vesicular monoamine), member 1 [Source:HGNC Symbol;Acc:10934] | |
| SLC18A2 | Solute carrier family 18 (vesicular monoamine), member 2 [Source:HGNC Symbol;Acc:10935] | |
| SLC19A1 | Solute carrier family 19 (folate transporter), member 1 [Source:HGNC Symbol;Acc:10937] | |
| SLC19A2 | Solute carrier family 19 (thiamine transporter), member 2 [Source:HGNC Symbol;Acc:10938] | |
| SLC1A1 | Solute carrier family 1 (neuronal/epithelial high affinity glutamate transporter, system Xag), member 1 [Source:HGNC Symbol;Acc:10939] | |
| SLC1A2 | Solute carrier family 1 (glial high affinity glutamate transporter), member 2 [Source:HGNC Symbol;Acc:10940] | |
| SLC1A4 | Solute carrier family 1 (glutamate/neutral amino acid transporter), member 4 [Source:HGNC Symbol;Acc:10942] | |
| SLC1A6 | Solute carrier family 1 (high affinity aspartate/glutamate transporter), member 6 [Source:HGNC Symbol;Acc:10944] | |
| SLC1A7 | Solute carrier family 1 (glutamate transporter), member 7 [Source:HGNC Symbol;Acc:10945] | |
| SLC20A2 | Solute carrier family 20 (phosphate transporter), member 2 [Source:HGNC Symbol;Acc:10947] | |
| SLC22A11 | Solute carrier family 22 (organic anion/urate transporter), member 11 [Source:HGNC Symbol;Acc:18120] | |
| SLC22A12 | Solute carrier family 22 (organic anion/urate transporter), member 12 [Source:HGNC Symbol;Acc:17989] | |

| | | |
|-----------------|---|--|
| SLC22A13 | Solute carrier family 22 (organic anion transporter), member 13 [Source:HGNC Symbol;Acc:8494] | |
| SLC22A15 | Solute carrier family 22, member 15 [Source:HGNC Symbol;Acc:20301] | |
| SLC22A16 | Solute carrier family 22 (organic cation/carnitine transporter), member 16 [Source:HGNC Symbol;Acc:20302] | |
| SLC22A18 | Solute carrier family 22, member 18 [Source:HGNC Symbol;Acc:10964] | |
| SLC22A2 | Solute carrier family 22 (organic cation transporter), member 2 [Source:HGNC Symbol;Acc:10966] | |
| SLC22A23 | Solute carrier family 22, member 23 [Source:HGNC Symbol;Acc:21106] | |
| SLC22A25 | Solute carrier family 22, member 25 [Source:HGNC Symbol;Acc:32935] | |
| SLC22A3 | Solute carrier family 22 (extraneuronal monoamine transporter), member 3 [Source:HGNC Symbol;Acc:10967] | |
| SLC22A7 | Solute carrier family 22 (organic anion transporter), member 7 [Source:HGNC Symbol;Acc:10971] | |
| SLC22A8 | Solute carrier family 22 (organic anion transporter), member 8 [Source:HGNC Symbol;Acc:10972] | |
| SLC23A1 | Solute carrier family 23 (nucleobase transporters), member 1 [Source:HGNC Symbol;Acc:10974] | |
| SLC23A2 | Solute carrier family 23 (nucleobase transporters), member 2 [Source:HGNC Symbol;Acc:10973] | |
| SLC24A1 | Solute carrier family 24 (sodium/potassium/calcium exchanger), member 1 [Source:HGNC Symbol;Acc:10975] | |
| SLC24A3 | Solute carrier family 24 (sodium/potassium/calcium exchanger), member 3 [Source:HGNC Symbol;Acc:10977] | |
| SLC24A4 | Solute carrier family 24 (sodium/potassium/calcium exchanger), member 4 [Source:HGNC Symbol;Acc:10978] | |
| SLC25A12 | Solute carrier family 25 (mitochondrial carrier, Aralar), member 12 [Source:HGNC Symbol;Acc:10982] | |
| SLC25A14 | Solute carrier family 25 (mitochondrial carrier, brain), member 14 [Source:HGNC Symbol;Acc:10984] | |
| SLC25A17 | Solute carrier family 25 (mitochondrial carrier; peroxisomal membrane protein, 34kda), member 17 [Source:HGNC Symbol;Acc:10987] | |

| | | |
|-----------------|---|--|
| SLC25A19 | Solute carrier family 25 (mitochondrial thiamine pyrophosphate carrier), member 19 [Source:HGNC Symbol;Acc:14409] | |
| SLC25A25 | Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 25 [Source:HGNC Symbol;Acc:20663] | |
| SLC25A29 | Solute carrier family 25, member 29 [Source:HGNC Symbol;Acc:20116] | |
| SLC25A3 | Solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 3 [Source:HGNC Symbol;Acc:10989] | |
| SLC25A30 | Solute carrier family 25, member 30 [Source:HGNC Symbol;Acc:27371] | |
| SLC25A32 | Solute carrier family 25, member 32 [Source:HGNC Symbol;Acc:29683] | |
| SLC25A37 | Solute carrier family 25, member 37 [Source:HGNC Symbol;Acc:29786] | |
| SLC25A38 | Solute carrier family 25, member 38 [Source:HGNC Symbol;Acc:26054] | |
| SLC25A40 | Solute carrier family 25, member 40 [Source:HGNC Symbol;Acc:29680] | |
| SLC25A48 | Solute carrier family 25, member 48 [Source:HGNC Symbol;Acc:30451] | |
| SLC26A1 | Solute carrier family 26 (sulfate transporter), member 1 [Source:HGNC Symbol;Acc:10993] | |
| SLC26A10 | Solute carrier family 26, member 10 [Source:HGNC Symbol;Acc:14470] | |
| SLC26A11 | Solute carrier family 26, member 11 [Source:HGNC Symbol;Acc:14471] | |
| SLC26A2 | Solute carrier family 26 (sulfate transporter), member 2 [Source:HGNC Symbol;Acc:10994] | |
| SLC26A4 | Solute carrier family 26, member 4 [Source:HGNC Symbol;Acc:8818] | |
| SLC27A4 | Solute carrier family 27 (fatty acid transporter), member 4 [Source:HGNC Symbol;Acc:10998] | |
| SLC29A2 | Solute carrier family 29 (nucleoside transporters), member 2 [Source:HGNC Symbol;Acc:11004] | |
| SLC29A3 | Solute carrier family 29 (nucleoside transporters), member 3 [Source:HGNC Symbol;Acc:23096] | |
| SLC2A1 | Solute carrier family 2 (facilitated glucose transporter), member 1 [Source:HGNC Symbol;Acc:11005] | |
| SLC2A13 | Solute carrier family 2 (facilitated glucose transporter), member 13 [Source:HGNC Symbol;Acc:15956] | |
| SLC2A2 | Solute carrier family 2 (facilitated glucose transporter), member 2 [Source:HGNC Symbol;Acc:11006] | |
| SLC2A4RG | SLC2A4 regulator [Source:HGNC Symbol;Acc:15930] | |

| | | |
|-----------------|---|--|
| SLC30A1 | Solute carrier family 30 (zinc transporter), member 1 [Source:HGNC Symbol;Acc:11012] | |
| SLC30A4 | Solute carrier family 30 (zinc transporter), member 4 [Source:HGNC Symbol;Acc:11015] | |
| SLC30A9 | Solute carrier family 30 (zinc transporter), member 9 [Source:HGNC Symbol;Acc:1329] | |
| SLC34A1 | Solute carrier family 34 (sodium phosphate), member 1 [Source:HGNC Symbol;Acc:11019] | |
| SLC35A1 | Solute carrier family 35 (CMP-sialic acid transporter), member A1 [Source:HGNC Symbol;Acc:11021] | |
| SLC35A3 | Solute carrier family 35 (UDP-N-acetylglucosamine (UDP-glcnac) transporter), member A3 [Source:HGNC Symbol;Acc:11023] | |
| SLC35A4 | Solute carrier family 35, member A4 [Source:HGNC Symbol;Acc:20753] | |
| SLC35B1 | Solute carrier family 35, member B1 [Source:HGNC Symbol;Acc:20798] | |
| SLC35B3 | Solute carrier family 35, member B3 [Source:HGNC Symbol;Acc:21601] | |
| SLC35B4 | Solute carrier family 35, member B4 [Source:HGNC Symbol;Acc:20584] | |
| SLC35C2 | Solute carrier family 35, member C2 [Source:HGNC Symbol;Acc:17117] | |
| SLC35D1 | Solute carrier family 35 (UDP-glucuronic acid/UDP-N-acetylgalactosamine dual transporter), member D1 [Source:HGNC Symbol;Acc:20800] | |
| SLC35D2 | Solute carrier family 35, member D2 [Source:HGNC Symbol;Acc:20799] | |
| SLC35D3 | Solute carrier family 35, member D3 [Source:HGNC Symbol;Acc:15621] | |
| SLC35E1 | Solute carrier family 35, member E1 [Source:HGNC Symbol;Acc:20803] | |
| SLC35E2 | Solute carrier family 35, member E2 [Source:HGNC Symbol;Acc:20863] | |
| SLC35E2B | Solute carrier family 35, member E2B [Source:HGNC Symbol;Acc:33941] | |
| SLC35F1 | Solute carrier family 35, member F1 [Source:HGNC Symbol;Acc:21483] | |
| SLC36A1 | Solute carrier family 36 (proton/amino acid symporter), member 1 [Source:HGNC Symbol;Acc:18761] | |
| SLC36A4 | Solute carrier family 36 (proton/amino acid symporter), member 4 [Source:HGNC Symbol;Acc:19660] | |
| SLC37A1 | Solute carrier family 37 (glycerol-3-phosphate transporter), member 1 [Source:HGNC Symbol;Acc:11024] | |
| SLC37A3 | Solute carrier family 37 (glycerol-3-phosphate transporter), member 3 [Source:HGNC Symbol;Acc:20651] | |

| | | |
|-----------------|---|---|
| SLC38A1 | Solute carrier family 38, member 1 [Source:HGNC Symbol;Acc:13447] | |
| SLC38A10 | Solute carrier family 38, member 10 [Source:HGNC Symbol;Acc:28237] | |
| SLC38A2 | Solute carrier family 38, member 2 [Source:HGNC Symbol;Acc:13448] | |
| SLC38A4 | Solute carrier family 38, member 4 [Source:HGNC Symbol;Acc:14679] | |
| SLC38A6 | Solute carrier family 38, member 6 [Source:HGNC Symbol;Acc:19863] | |
| SLC38A7 | Solute carrier family 38, member 7 [Source:HGNC Symbol;Acc:25582] | |
| SLC39A10 | Solute carrier family 39 (zinc transporter), member 10 [Source:HGNC Symbol;Acc:20861] | |
| SLC39A13 | Solute carrier family 39 (zinc transporter), member 13 [Source:HGNC Symbol;Acc:20859] | |
| SLC39A14 | Solute carrier family 39 (zinc transporter), member 14 [Source:HGNC Symbol;Acc:20858] | |
| SLC39A2 | Solute carrier family 39 (zinc transporter), member 2 [Source:HGNC Symbol;Acc:17127] | |
| SLC39A3 | Solute carrier family 39 (zinc transporter), member 3 [Source:HGNC Symbol;Acc:17128] | |
| SLC39A4 | Solute carrier family 39 (zinc transporter), member 4 [Source:HGNC Symbol;Acc:17129] | |
| SLC39A8 | Solute carrier family 39 (zinc transporter), member 8 [Source:HGNC Symbol;Acc:20862] | |
| SLC3A1 | Solute carrier family 3 (cystine, dibasic and neutral amino acid transporters, activator of cystine, dibasic and neutral amino acid transport), member 1 [Source:HGNC Symbol;Acc:11025] | |
| SLC3A2 | Solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2 [Source:HGNC Symbol;Acc:11026] | |
| SLC45A3 | Solute carrier family 45, member 3 | √ |
| SLC46A1 | Solute carrier family 46 (folate transporter), member 1 [Source:HGNC Symbol;Acc:30521] | |
| SLC46A2 | Solute carrier family 46, member 2 [Source:HGNC Symbol;Acc:16055] | |
| SLC48A1 | Solute carrier family 48 (heme transporter), member 1 [Source:HGNC Symbol;Acc:26035] | |
| SLC4A1 | Solute carrier family 4, anion exchanger, member 1 (erythrocyte membrane protein band 3, Diego blood group) [Source:HGNC Symbol;Acc:11027] | |

| | | |
|----------------|--|--|
| SLC4A10 | Solute carrier family 4, sodium bicarbonate transporter, member 10 [Source:HGNC Symbol;Acc:13811] | |
| SLC4A2 | Solute carrier family 4, anion exchanger, member 2 (erythrocyte membrane protein band 3-like 1) [Source:HGNC Symbol;Acc:11028] | |
| SLC4A4 | Solute carrier family 4, sodium bicarbonate cotransporter, member 4 [Source:HGNC Symbol;Acc:11030] | |
| SLC4A5 | Solute carrier family 4, sodium bicarbonate cotransporter, member 5 [Source:HGNC Symbol;Acc:18168] | |
| SLC5A1 | Solute carrier family 5 (sodium/glucose cotransporter), member 1 [Source:HGNC Symbol;Acc:11036] | |
| SLC5A10 | Solute carrier family 5 (sodium/glucose cotransporter), member 10 [Source:HGNC Symbol;Acc:23155] | |
| SLC5A11 | Solute carrier family 5 (sodium/glucose cotransporter), member 11 [Source:HGNC Symbol;Acc:23091] | |
| SLC5A3 | Solute carrier family 5 (sodium/myo-inositol cotransporter), member 3 [Source:HGNC Symbol;Acc:11038] | |
| SLC5A4 | Solute carrier family 5 (low affinity glucose cotransporter), member 4 [Source:HGNC Symbol;Acc:11039] | |
| SLC5A9 | Solute carrier family 5 (sodium/glucose cotransporter), member 9 [Source:HGNC Symbol;Acc:22146] | |
| SLC6A1 | Solute carrier family 6 (neurotransmitter transporter, GABA), member 1 [Source:HGNC Symbol;Acc:11042] | |
| SLC6A12 | Solute carrier family 6 (neurotransmitter transporter, betaine/GABA), member 12 [Source:HGNC Symbol;Acc:11045] | |
| SLC6A13 | Solute carrier family 6 (neurotransmitter transporter, GABA), member 13 [Source:HGNC Symbol;Acc:11046] | |
| SLC6A17 | Solute carrier family 6, member 17 [Source:HGNC Symbol;Acc:31399] | |
| SLC6A19 | Solute carrier family 6 (neutral amino acid transporter), member 19 [Source:HGNC Symbol;Acc:27960] | |
| SLC6A20 | Solute carrier family 6 (proline IMINO transporter), member 20 [Source:HGNC Symbol;Acc:30927] | |
| SLC6A3 | Solute carrier family 6 (neurotransmitter transporter, dopamine), member 3 [Source:HGNC Symbol;Acc:11049] | |

| | | |
|-----------------|---|--|
| SLC6A4 | Solute carrier family 6 (neurotransmitter transporter, serotonin), member 4 [Source:HGNC Symbol;Acc:11050] | |
| SLC6A6 | Solute carrier family 6 (neurotransmitter transporter, taurine), member 6 [Source:HGNC Symbol;Acc:11052] | |
| SLC6A8 | Solute carrier family 6 (neurotransmitter transporter, creatine), member 8 [Source:HGNC Symbol;Acc:11055] | |
| SLC6A9 | Solute carrier family 6 (neurotransmitter transporter, glycine), member 9 [Source:HGNC Symbol;Acc:11056] | |
| SLC7A1 | Solute carrier family 7 (cationic amino acid transporter, y+ system), member 1 [Source:HGNC Symbol;Acc:11057] | |
| SLC7A11 | Solute carrier family 7, (cationic amino acid transporter, y+ system) member 11 [Source:HGNC Symbol;Acc:11059] | |
| SLC7A14 | Solute carrier family 7 (cationic amino acid transporter, y+ system), member 14 [Source:HGNC Symbol;Acc:29326] | |
| SLC7A6 | Solute carrier family 7 (cationic amino acid transporter, y+ system), member 6 [Source:HGNC Symbol;Acc:11064] | |
| SLC7A6OS | Solute carrier family 7, member 6 opposite strand [Source:HGNC Symbol;Acc:25807] | |
| SLC8A1 | Solute carrier family 8 (sodium/calcium exchanger), member 1 [Source:HGNC Symbol;Acc:11068] | |
| SLC9A1 | Solute carrier family 9 (sodium/hydrogen exchanger), member 1 [Source:HGNC Symbol;Acc:11071] | |
| SLC9A2 | Solute carrier family 9 (sodium/hydrogen exchanger), member 2 [Source:HGNC Symbol;Acc:11072] | |
| SLC9A3 | Solute carrier family 9 (sodium/hydrogen exchanger), member 3 [Source:HGNC Symbol;Acc:11073] | |
| SLC9A4 | Solute carrier family 9 (sodium/hydrogen exchanger), member 4 [Source:HGNC Symbol;Acc:11077] | |
| SLC9A6 | Solute carrier family 9 (sodium/hydrogen exchanger), member 6 [Source:HGNC Symbol;Acc:11079] | |
| SLCO1A2 | Solute carrier organic anion transporter family, member 1A2 [Source:HGNC Symbol;Acc:10956] | |

| | | |
|----------------|--|--|
| SLCO2A1 | Solute carrier organic anion transporter family, member 2A1 [Source:HGNC Symbol;Acc:10955] | |
| SLCO4A1 | Solute carrier organic anion transporter family, member 4A1 [Source:HGNC Symbol;Acc:10953] | |
| SLCO6A1 | Solute carrier organic anion transporter family, member 6A1 [Source:HGNC Symbol;Acc:23613] | |
| SLFN5 | Schlafen family member 5 [Source:HGNC Symbol;Acc:28286] | |
| SLIT1 | Slit homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:11085] | |
| SLIT2 | Slit homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:11086] | |
| SLIT3 | Slit homolog 3 (Drosophila) [Source:HGNC Symbol;Acc:11087] | |
| SLITRK2 | SLIT and NTRK-like family, member 2 [Source:HGNC Symbol;Acc:13449] | |
| SLITRK5 | SLIT and NTRK-like family, member 5 [Source:HGNC Symbol;Acc:20295] | |
| SLK | STE20-like kinase [Source:HGNC Symbol;Acc:11088] | |
| SLMAP | Sarcolemma associated protein [Source:HGNC Symbol;Acc:16643] | |
| SLMO1 | Slowmo homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:24639] | |
| SLN | Sarcoplipin [Source:HGNC Symbol;Acc:11089] | |
| SMAD3 | SMAD family member 3 [Source:HGNC Symbol;Acc:6769] | |
| SMAD4 | SMAD family member 4 [Source:HGNC Symbol;Acc:6770] | |
| SMAD5 | SMAD family member 5 [Source:HGNC Symbol;Acc:6771] | |
| SMAD7 | SMAD family member 7 [Source:HGNC Symbol;Acc:6773] | |
| SMAP2 | Small arfgap2 [Source:HGNC Symbol;Acc:25082] | |
| SMARCA1 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 1 [Source:HGNC Symbol;Acc:11097] | |
| SMARCA5 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 5 [Source:HGNC Symbol;Acc:11101] | |
| SMARCC2 | SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 2 [Source:HGNC Symbol;Acc:11105] | |
| SMC1A | Structural maintenance of chromosomes 1A [Source:HGNC Symbol;Acc:11111] | |
| SMC1B | Structural maintenance of chromosomes 1B [Source:HGNC Symbol;Acc:11112] | |

| | | |
|----------------|---|---|
| SMC2 | Structural maintenance of chromosomes 2 [Source:HGNC Symbol;Acc:14011] | |
| SMC4 | Structural maintenance of chromosomes 4 [Source:HGNC Symbol;Acc:14013] | |
| SMC6 | Structural maintenance of chromosomes 6 [Source:HGNC Symbol;Acc:20466] | |
| SMCHD1 | Structural maintenance of chromosomes flexible hinge domain containing 1 [Source:HGNC Symbol;Acc:29090] | |
| SMCR7 | Smith-Magenis syndrome chromosome region, candidate 7 [Source:HGNC Symbol;Acc:17920] | |
| SMCR7L | Smith-Magenis syndrome chromosome region, candidate 7-like [Source:HGNC Symbol;Acc:25979] | |
| SMG1 | SMG1 homolog, phosphatidylinositol 3-kinase-related kinase (C. Elegans) [Source:HGNC Symbol;Acc:30045] | |
| SMG5 | Smg-5 homolog, nonsense mediated mrna decay factor (C. Elegans) [Source:HGNC Symbol;Acc:24644] | |
| SMG6 | Smg-6 homolog, nonsense mediated mrna decay factor (C. Elegans) [Source:HGNC Symbol;Acc:17809] | |
| SMG7 | Smg-7 homolog, nonsense mediated mrna decay factor (C. Elegans) [Source:HGNC Symbol;Acc:16792] | |
| SMO | Smoothened homolog (Drosophila) | √ |
| SMPD4 | Sphingomyelin phosphodiesterase 4, neutral membrane (neutral sphingomyelinase-3) [Source:HGNC Symbol;Acc:32949] | |
| SMPDL3A | Sphingomyelin phosphodiesterase, acid-like 3A [Source:HGNC Symbol;Acc:17389] | |
| SMPX | Small muscle protein, X-linked [Source:HGNC Symbol;Acc:11122] | |
| SMTN | Smoothelin [Source:HGNC Symbol;Acc:11126] | |
| SMU1 | Smu-1 suppressor of mec-8 and unc-52 homolog (C. Elegans) [Source:HGNC Symbol;Acc:18247] | |
| SMURF1 | SMAD specific E3 ubiquitin protein ligase 1 [Source:HGNC Symbol;Acc:16807] | |
| SMYD1 | SET and MYND domain containing 1 [Source:HGNC Symbol;Acc:20986] | |
| SMYD4 | SET and MYND domain containing 4 [Source:HGNC Symbol;Acc:21067] | |

| | | |
|-----------------|--|--|
| SMYD5 | SMYD family member 5 [Source:HGNC Symbol;Acc:16258] | |
| SNAP25 | Synaptosomal-associated protein, 25kda [Source:HGNC Symbol;Acc:11132] | |
| SNCAIP | Synuclein, alpha interacting protein [Source:HGNC Symbol;Acc:11139] | |
| SNED1 | Sushi, nidogen and EGF-like domains 1 [Source:HGNC Symbol;Acc:24696] | |
| SNRK | SNF related kinase [Source:HGNC Symbol;Acc:30598] | |
| SNRNP200 | Small nuclear ribonucleoprotein 200kda (U5) [Source:HGNC Symbol;Acc:30859] | |
| SNRNP70 | Small nuclear ribonucleoprotein 70kda (U1) [Source:HGNC Symbol;Acc:11150] | |
| SNRPD1 | Small nuclear ribonucleoprotein D1 polypeptide 16kda [Source:HGNC Symbol;Acc:11158] | |
| SNRPD3 | Small nuclear ribonucleoprotein D3 polypeptide 18kda [Source:HGNC Symbol;Acc:11160] | |
| SNRPE | Small nuclear ribonucleoprotein polypeptide E [Source:HGNC Symbol;Acc:11161] | |
| SNRPN | Small nuclear ribonucleoprotein polypeptide N [Source:HGNC Symbol;Acc:11164] | |
| SNTB2 | Syntrophin, beta 2 (dystrophin-associated protein A1, 59kda, basic component 2) [Source:HGNC Symbol;Acc:11169] | |
| SNURF | SNRPN upstream reading frame [Source:HGNC Symbol;Acc:11171] | |
| SNX1 | Sorting nexin 1 [Source:HGNC Symbol;Acc:11172] | |
| SNX10 | Sorting nexin 10 [Source:HGNC Symbol;Acc:14974] | |
| SNX13 | Sorting nexin 13 [Source:HGNC Symbol;Acc:21335] | |
| SNX19 | Sorting nexin 19 [Source:HGNC Symbol;Acc:21532] | |
| SNX24 | Sorting nexin 24 [Source:HGNC Symbol;Acc:21533] | |
| SNX25 | Sorting nexin 25 [Source:HGNC Symbol;Acc:21883] | |
| SNX29 | Sorting nexin 29 [Source:HGNC Symbol;Acc:30542] | |
| SNX30 | Sorting nexin family member 30 [Source:HGNC Symbol;Acc:23685] | |
| SNX33 | Sorting nexin 33 [Source:HGNC Symbol;Acc:28468] | |
| SNX4 | Sorting nexin 4 [Source:HGNC Symbol;Acc:11175] | |
| SNX5 | Sorting nexin 5 [Source:HGNC Symbol;Acc:14969] | |
| SNX7 | Sorting nexin 7 [Source:HGNC Symbol;Acc:14971] | |

| | | |
|---------------|--|---|
| SOAT1 | Sterol O-acyltransferase 1 [Source:HGNC Symbol;Acc:11177] | |
| SOCS4 | Suppressor of cytokine signaling 4 [Source:HGNC Symbol;Acc:19392] | |
| SOCS5 | Suppressor of cytokine signaling 5 [Source:HGNC Symbol;Acc:16852] | |
| SOD2 | Superoxide dismutase 2, mitochondrial [Source:HGNC Symbol;Acc:11180] | |
| SOHLH1 | Spermatogenesis and oogenesis specific basic helix-loop-helix 1 [Source:HGNC Symbol;Acc:27845] | |
| SOLH | Small optic lobes homolog (Drosophila) [Source:HGNC Symbol;Acc:11182] | |
| SORBS2 | Sorbin and SH3 domain containing 2 [Source:HGNC Symbol;Acc:24098] | |
| SORBS3 | Sorbin and SH3 domain containing 3 [Source:HGNC Symbol;Acc:30907] | |
| SORCS1 | Sortilin-related VPS10 domain containing receptor 1 [Source:HGNC Symbol;Acc:16697] | |
| SORCS2 | Sortilin-related VPS10 domain containing receptor 2 [Source:HGNC Symbol;Acc:16698] | |
| SORCS3 | Sortilin-related VPS10 domain containing receptor 3 [Source:HGNC Symbol;Acc:16699] | |
| SORL1 | Sortilin-related receptor, L(DLR class) A repeats containing [Source:HGNC Symbol;Acc:11185] | |
| SORT1 | Sortilin 1 [Source:HGNC Symbol;Acc:11186] | |
| SOS1 | Son of sevenless homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:11187] | |
| SOS2 | Son of sevenless homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:11188] | |
| SOX13 | SR Y (sex determining region Y)-box 13 [Source:HGNC Symbol;Acc:11192] | |
| SOX2 | SR Y (sex determining region Y)-box 2 | √ |
| SOX6 | SR Y (sex determining region Y)-box 6 [Source:HGNC Symbol;Acc:16421] | |
| SOX7 | SR Y (sex determining region Y)-box 7 [Source:HGNC Symbol;Acc:18196] | |
| SOX9 | SR Y (sex determining region Y)-box 9 [Source:HGNC Symbol;Acc:11204] | |
| SP110 | SP110 nuclear body protein [Source:HGNC Symbol;Acc:5401] | |
| SP140 | SP140 nuclear body protein [Source:HGNC Symbol;Acc:17133] | |
| SP140L | SP140 nuclear body protein-like [Source:HGNC Symbol;Acc:25105] | |
| SP2 | Sp2 transcription factor [Source:HGNC Symbol;Acc:11207] | |
| SP3 | Sp3 transcription factor [Source:HGNC Symbol;Acc:11208] | |

| | | |
|----------------|---|--|
| SP8 | Sp8 transcription factor [Source:HGNC Symbol;Acc:19196] | |
| SPAG11A | Sperm associated antigen 11A [Source:HGNC Symbol;Acc:33342] | |
| SPAG11B | Sperm associated antigen 11B [Source:HGNC Symbol;Acc:14534] | |
| SPAG16 | Sperm associated antigen 16 [Source:HGNC Symbol;Acc:23225] | |
| SPAG5 | Sperm associated antigen 5 [Source:HGNC Symbol;Acc:13452] | |
| SPAG6 | Sperm associated antigen 6 [Source:HGNC Symbol;Acc:11215] | |
| SPAG9 | Sperm associated antigen 9 [Source:HGNC Symbol;Acc:14524] | |
| SPATA13 | Spermatogenesis associated 13 [Source:HGNC Symbol;Acc:23222] | |
| SPATA17 | Spermatogenesis associated 17 [Source:HGNC Symbol;Acc:25184] | |
| SPATA20 | Spermatogenesis associated 20 [Source:HGNC Symbol;Acc:26125] | |
| SPATA5 | Spermatogenesis associated 5 [Source:HGNC Symbol;Acc:18119] | |
| SPATA7 | Spermatogenesis associated 7 [Source:HGNC Symbol;Acc:20423] | |
| SPATA9 | Spermatogenesis associated 9 [Source:HGNC Symbol;Acc:22988] | |
| SPDYE4 | Speedy homolog E4 (<i>Xenopus laevis</i>) [Source:HGNC Symbol;Acc:35463] | |
| SPECC1 | Sperm antigen with calponin homology and coiled-coil domains 1 [Source:HGNC Symbol;Acc:30615] | |
| SPEF2 | Sperm flagellar 2 [Source:HGNC Symbol;Acc:26293] | |
| SPEG | SPEG complex locus [Source:HGNC Symbol;Acc:16901] | |
| SPEN | Spn homolog, transcriptional regulator (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:17575] | |
| SPG11 | Spastic paraplegia 11 (autosomal recessive) [Source:HGNC Symbol;Acc:11226] | |
| SPG21 | Spastic paraplegia 21 (autosomal recessive, Mast syndrome) [Source:HGNC Symbol;Acc:20373] | |
| SPHK1 | Sphingosine kinase 1 [Source:HGNC Symbol;Acc:11240] | |
| SPHKAP | SPHK1 interactor, AKAP domain containing [Source:HGNC Symbol;Acc:30619] | |
| SPINK13 | Serine peptidase inhibitor, Kazal type 13 (putative) [Source:HGNC Symbol;Acc:27200] | |
| SPINK7 | Serine peptidase inhibitor, Kazal type 7 (putative) [Source:HGNC Symbol;Acc:24643] | |
| SPINT2 | Serine peptidase inhibitor, Kunitz type, 2 [Source:HGNC Symbol;Acc:11247] | |

| | | |
|---------------|---|--|
| SPIRE1 | Spire homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:30622] | |
| SPN | Sialoporphin [Source:HGNC Symbol;Acc:11249] | |
| SPNS1 | Spinster homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:30621] | |
| SPOCK1 | Sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) 1 [Source:HGNC Symbol;Acc:11251] | |
| SPOCK2 | Sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) 2 [Source:HGNC Symbol;Acc:13564] | |
| SPOCK3 | Sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) 3 [Source:HGNC Symbol;Acc:13565] | |
| SPON2 | Spondin 2, extracellular matrix protein [Source:HGNC Symbol;Acc:11253] | |
| SPOP | Speckle-type POZ protein [Source:HGNC Symbol;Acc:11254] | |
| SPOPL | Speckle-type POZ protein-like [Source:HGNC Symbol;Acc:27934] | |
| SPRED1 | Sprouty-related, EVH1 domain containing 1 [Source:HGNC Symbol;Acc:20249] | |
| SPRY4 | Sprouty homolog 4 (Drosophila) [Source:HGNC Symbol;Acc:15533] | |
| SPSB3 | Spla/Ryanodine receptor domain and SOCS box containing 3 [Source:HGNC Symbol;Acc:30629] | |
| SPTA1 | Spectrin, alpha, erythrocytic 1 (elliptocytosis 2) [Source:HGNC Symbol;Acc:11272] | |
| SPTB | Spectrin, beta, erythrocytic [Source:HGNC Symbol;Acc:11274] | |
| SPTLC2 | Serine palmitoyltransferase, long chain base subunit 2 [Source:HGNC Symbol;Acc:11278] | |
| SPZ1 | Spermatogenic leucine zipper 1 [Source:HGNC Symbol;Acc:30721] | |
| SQSTM1 | Sequestosome 1 [Source:HGNC Symbol;Acc:11280] | |
| SRA1 | Steroid receptor RNA activator 1 [Source:HGNC Symbol;Acc:11281] | |
| SRC | V-src sarcoma (Schmidt-Ruppin A-2) viral oncogene homolog (avian) [Source:HGNC Symbol;Acc:11283] | |
| SRCAP | Snf2-related CREBBP activator protein [Source:HGNC Symbol;Acc:16974] | |
| SRCIN1 | SRC kinase signaling inhibitor 1 [Source:HGNC Symbol;Acc:29506] | |
| SREBF1 | Sterol regulatory element binding transcription factor 1 [Source:HGNC Symbol;Acc:11289] | |

| | | |
|---------------|--|---|
| SREBF2 | Sterol regulatory element binding transcription factor 2 [Source:HGNC Symbol;Acc:11290] | |
| SREK1 | Splicing regulatory glutamine/lysine-rich protein 1 [Source:HGNC Symbol;Acc:17882] | |
| SRGAP3 | SLIT-ROBO Rho GTPase activating protein 3 | √ |
| SRI | Sorcin [Source:HGNC Symbol;Acc:11292] | |
| SRP72 | Signal recognition particle 72kda [Source:HGNC Symbol;Acc:11303] | |
| SRPK1 | SRSF protein kinase 1 [Source:HGNC Symbol;Acc:11305] | |
| SRPK2 | SRSF protein kinase 2 [Source:HGNC Symbol;Acc:11306] | |
| SRPK3 | SRSF protein kinase 3 [Source:HGNC Symbol;Acc:11402] | |
| SRRM4 | Serine/arginine repetitive matrix 4 [Source:HGNC Symbol;Acc:29389] | |
| SRRT | Serrate RNA effector molecule homolog (Arabidopsis) [Source:HGNC Symbol;Acc:24101] | |
| SRSF1 | Serine/arginine-rich splicing factor 1 [Source:HGNC Symbol;Acc:10780] | |
| SRSF10 | Serine/arginine-rich splicing factor 10 [Source:HGNC Symbol;Acc:16713] | |
| SRSF11 | Serine/arginine-rich splicing factor 11 [Source:HGNC Symbol;Acc:10782] | |
| SS18 | Synovial sarcoma translocation, chromosome 18 | √ |
| SS18L1 | Synovial sarcoma translocation gene on chromosome 18-like 1 | √ |
| SS18L1 | Synovial sarcoma translocation gene on chromosome 18-like 1 [Source:HGNC Symbol;Acc:15592] | |
| SSBP1 | Single-stranded DNA binding protein 1 [Source:HGNC Symbol;Acc:11317] | |
| SSBP2 | Single-stranded DNA binding protein 2 [Source:HGNC Symbol;Acc:15831] | |
| SSC5D | Scavenger receptor cysteine rich domain containing (5 domains) [Source:HGNC Symbol;Acc:26641] | |
| SSH1 | Slingshot homolog 1 (Drosophila) [Source:HGNC Symbol;Acc:30579] | |
| SSH2 | Slingshot homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:30580] | |
| SSH3 | Slingshot homolog 3 (Drosophila) [Source:HGNC Symbol;Acc:30581] | |
| SSR3 | Signal sequence receptor, gamma (translocon-associated protein gamma) [Source:HGNC Symbol;Acc:11325] | |
| SSRP1 | Structure specific recognition protein 1 [Source:HGNC Symbol;Acc:11327] | |
| SSTR1 | Somatostatin receptor 1 [Source:HGNC Symbol;Acc:11330] | |
| SSTR2 | Somatostatin receptor 2 [Source:HGNC Symbol;Acc:11331] | |
| SSTR5 | Somatostatin receptor 5 [Source:HGNC Symbol;Acc:11334] | |

| | | |
|-------------------|---|---|
| SSU72 | SSU72 RNA polymerase II CTD phosphatase homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:25016] | |
| SSX1 | Synovial sarcoma, X breakpoint 1 [Source:HGNC Symbol;Acc:11335] | √ |
| SSX2 | Synovial sarcoma, X breakpoint 2 [Source:HGNC Symbol;Acc:11336] | √ |
| SSX2B | Synovial sarcoma, X breakpoint 2B [Source:HGNC Symbol;Acc:22263] | |
| SSX3 | Synovial sarcoma, X breakpoint 3 [Source:HGNC Symbol;Acc:11337] | |
| SSX4 | Synovial sarcoma, X breakpoint 4 [Source:HGNC Symbol;Acc:11338] | √ |
| SSX4B | Synovial sarcoma, X breakpoint 4B [Source:HGNC Symbol;Acc:16880] | |
| SSX5 | Synovial sarcoma, X breakpoint 5 [Source:HGNC Symbol;Acc:11339] | |
| SSX6 | Synovial sarcoma, X breakpoint 6 (pseudogene) [Source:HGNC Symbol;Acc:19652] | |
| SSX7 | Synovial sarcoma, X breakpoint 7 [Source:HGNC Symbol;Acc:19653] | |
| SSX9 | Synovial sarcoma, X breakpoint 9 [Source:HGNC Symbol;Acc:19655] | |
| ST13 | Suppression of tumorigenicity 13 (colon carcinoma) (Hsp70 interacting protein) [Source:HGNC Symbol;Acc:11343] | |
| ST18 | Suppression of tumorigenicity 18 (breast carcinoma) (zinc finger protein) [Source:HGNC Symbol;Acc:18695] | |
| ST5 | Suppression of tumorigenicity 5 [Source:HGNC Symbol;Acc:11350] | |
| ST6GAL2 | ST6 beta-galactosamide alpha-2,6-sialyltransferase 2 [Source:HGNC Symbol;Acc:10861] | |
| ST6GALNAC3 | ST6 (alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 3 [Source:HGNC Symbol;Acc:19343] | |
| ST6GALNAC5 | ST6 (alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 5 [Source:HGNC Symbol;Acc:19342] | |
| ST6GALNAC6 | ST6 (alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 6 [Source:HGNC Symbol;Acc:23364] | |
| ST7L | Suppression of tumorigenicity 7 like [Source:HGNC Symbol;Acc:18441] | |
| ST8SIA2 | ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 2 [Source:HGNC Symbol;Acc:10870] | |

| | | |
|----------------|---|---|
| ST8SIA4 | ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 4 [Source:HGNC Symbol;Acc:10871] | |
| STAB1 | Stabilin 1 [Source:HGNC Symbol;Acc:18628] | |
| STAB2 | Stabilin 2 [Source:HGNC Symbol;Acc:18629] | |
| STAC2 | SH3 and cysteine rich domain 2 [Source:HGNC Symbol;Acc:23990] | |
| STAG1 | Stromal antigen 1 [Source:HGNC Symbol;Acc:11354] | |
| STAG2 | Stromal antigen 2 [Source:HGNC Symbol;Acc:11355] | √ |
| STARD3 | Star-related lipid transfer (START) domain containing 3 [Source:HGNC Symbol;Acc:17579] | |
| STARD4 | Star-related lipid transfer (START) domain containing 4 [Source:HGNC Symbol;Acc:18058] | |
| STARD5 | Star-related lipid transfer (START) domain containing 5 [Source:HGNC Symbol;Acc:18065] | |
| STARD7 | Star-related lipid transfer (START) domain containing 7 [Source:HGNC Symbol;Acc:18063] | |
| STARD9 | Star-related lipid transfer (START) domain containing 9 [Source:HGNC Symbol;Acc:19162] | |
| STAT3 | Signal transducer and activator of transcription 3 (acute-phase response factor) [Source:HGNC Symbol;Acc:11364] | √ |
| STAT4 | Signal transducer and activator of transcription 4 [Source:HGNC Symbol;Acc:11365] | |
| STAT5A | Signal transducer and activator of transcription 5A [Source:HGNC Symbol;Acc:11366] | |
| STAT6 | Signal transducer and activator of transcription 6, interleukin-4 induced [Source:HGNC Symbol;Acc:11368] | |
| STBD1 | Starch binding domain 1 [Source:HGNC Symbol;Acc:24854] | |
| STC1 | Stanniocalcin 1 [Source:HGNC Symbol;Acc:11373] | |
| STC2 | Stanniocalcin 2 [Source:HGNC Symbol;Acc:11374] | |
| STEAP3 | STEAP family member 3 [Source:HGNC Symbol;Acc:24592] | |
| STEAP4 | STEAP family member 4 [Source:HGNC Symbol;Acc:21923] | |
| STIL | SCL/TAL1 interrupting locus [Source:HGNC Symbol;Acc:10879] | |
| STIM2 | Stromal interaction molecule 2 [Source:HGNC Symbol;Acc:19205] | |
| STIP1 | Stress-induced-phosphoprotein 1 [Source:HGNC Symbol;Acc:11387] | |

| | | |
|----------------|--|--|
| STK3 | Serine/threonine kinase 3 [Source:HGNC Symbol;Acc:11406] | |
| STK31 | Serine/threonine kinase 31 [Source:HGNC Symbol;Acc:11407] | |
| STK32B | Serine/threonine kinase 32B [Source:HGNC Symbol;Acc:14217] | |
| STK35 | Serine/threonine kinase 35 [Source:HGNC Symbol;Acc:16254] | |
| STK36 | Serine/threonine kinase 36 [Source:HGNC Symbol;Acc:17209] | |
| STK38L | Serine/threonine kinase 38 like [Source:HGNC Symbol;Acc:17848] | |
| STK39 | Serine threonine kinase 39 [Source:HGNC Symbol;Acc:17717] | |
| STK4 | Serine/threonine kinase 4 [Source:HGNC Symbol;Acc:11408] | |
| STON1 | Stonin 1 [Source:HGNC Symbol;Acc:17003] | |
| STOX1 | Storkhead box 1 [Source:HGNC Symbol;Acc:23508] | |
| STOX2 | Storkhead box 2 [Source:HGNC Symbol;Acc:25450] | |
| STRA6 | Stimulated by retinoic acid gene 6 homolog (mouse) [Source:HGNC Symbol;Acc:30650] | |
| STRADA | STE20-related kinase adaptor alpha [Source:HGNC Symbol;Acc:30172] | |
| STRAP | Serine/threonine kinase receptor associated protein [Source:HGNC Symbol;Acc:30796] | |
| STRBP | Spermatid perinuclear RNA binding protein [Source:HGNC Symbol;Acc:16462] | |
| STRC | Stereocilin [Source:HGNC Symbol;Acc:16035] | |
| STRN4 | Striatin, calmodulin binding protein 4 [Source:HGNC Symbol;Acc:15721] | |
| STS | Steroid sulfatase (microsomal), isozyme S [Source:HGNC Symbol;Acc:11425] | |
| STT3B | STT3, subunit of the oligosaccharyltransferase complex, homolog B (S. Cerevisiae) [Source:HGNC Symbol;Acc:30611] | |
| STX12 | Syntaxin 12 [Source:HGNC Symbol;Acc:11430] | |
| STX16 | Syntaxin 16 [Source:HGNC Symbol;Acc:11431] | |
| STX17 | Syntaxin 17 [Source:HGNC Symbol;Acc:11432] | |
| STX2 | Syntaxin 2 [Source:HGNC Symbol;Acc:3403] | |
| STXBP4 | Syntaxin binding protein 4 [Source:HGNC Symbol;Acc:19694] | |
| STXBP5L | Syntaxin binding protein 5-like [Source:HGNC Symbol;Acc:30757] | |
| STXBP6 | Syntaxin binding protein 6 (amisyn) [Source:HGNC Symbol;Acc:19666] | |
| SUGP1 | SURP and G patch domain containing 1 [Source:HGNC Symbol;Acc:18643] | |

| | | |
|-----------------|--|---|
| SUGP2 | SURP and G patch domain containing 2 [Source:HGNC Symbol;Acc:18641] | |
| SULF2 | Sulfatase 2 [Source:HGNC Symbol;Acc:20392] | |
| SULT1A1 | Sulfotransferase family, cytosolic, 1A, phenol-preferring, member 1 [Source:HGNC Symbol;Acc:11453] | |
| SULT1A2 | Sulfotransferase family, cytosolic, 1A, phenol-preferring, member 2 [Source:HGNC Symbol;Acc:11454] | |
| SULT1A3 | Sulfotransferase family, cytosolic, 1A, phenol-preferring, member 3 [Source:HGNC Symbol;Acc:11455] | |
| SULT1A4 | Sulfotransferase family, cytosolic, 1A, phenol-preferring, member 4 [Source:HGNC Symbol;Acc:30004] | |
| SULT1C4 | Sulfotransferase family, cytosolic, 1C, member 4 [Source:HGNC Symbol;Acc:11457] | |
| SULT4A1 | Sulfotransferase family 4A, member 1 [Source:HGNC Symbol;Acc:14903] | |
| SUMF1 | Sulfatase modifying factor 1 [Source:HGNC Symbol;Acc:20376] | |
| SUMO3 | SMT3 suppressor of mif two 3 homolog 3 (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:11124] | |
| SUN1 | Sad1 and UNC84 domain containing 1 [Source:HGNC Symbol;Acc:18587] | |
| SUN5 | Sad1 and UNC84 domain containing 5 [Source:HGNC Symbol;Acc:16252] | |
| SUOX | Sulfite oxidase [Source:HGNC Symbol;Acc:11460] | |
| SUPT3H | Suppressor of Ty 3 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:11466] | |
| SUPT5H | Suppressor of Ty 5 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:11469] | |
| SURF4 | Surfeit 4 [Source:HGNC Symbol;Acc:11476] | |
| SUSD1 | Sushi domain containing 1 [Source:HGNC Symbol;Acc:25413] | |
| SUSD2 | Sushi domain containing 2 [Source:HGNC Symbol;Acc:30667] | |
| SUSD4 | Sushi domain containing 4 [Source:HGNC Symbol;Acc:25470] | |
| SUSD5 | Sushi domain containing 5 [Source:HGNC Symbol;Acc:29061] | |
| SUV420H1 | Suppressor of variegation 4-20 homolog 1 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:24283] | |
| SUZ12 | Suppressor of zeste 12 homolog (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:17101] | √ |

| | | |
|----------------|---|--|
| SV2B | Synaptic vesicle glycoprotein 2B [Source:HGNC Symbol;Acc:16874] | |
| SV2C | Synaptic vesicle glycoprotein 2C [Source:HGNC Symbol;Acc:30670] | |
| SVEP1 | Sushi, von Willebrand factor type A, EGF and pentraxin domain containing 1 [Source:HGNC Symbol;Acc:15985] | |
| SVIL | Supervillin [Source:HGNC Symbol;Acc:11480] | |
| SVOP | SV2 related protein homolog (rat) [Source:HGNC Symbol;Acc:25417] | |
| SYBU | Syntabulin (syntaxin-interacting) [Source:HGNC Symbol;Acc:26011] | |
| SYK | Spleen tyrosine kinase [Source:HGNC Symbol;Acc:11491] | |
| SYMPK | Symplekin [Source:HGNC Symbol;Acc:22935] | |
| SYN1 | Synapsin I [Source:HGNC Symbol;Acc:11494] | |
| SYN2 | Synapsin II [Source:HGNC Symbol;Acc:11495] | |
| SYNC | Syncoilin, intermediate filament protein [Source:HGNC Symbol;Acc:28897] | |
| SYNCRIP | Synaptotagmin binding, cytoplasmic RNA interacting protein [Source:HGNC Symbol;Acc:16918] | |
| SYNE1 | Spectrin repeat containing, nuclear envelope 1 [Source:HGNC Symbol;Acc:17089] | |
| SYNE2 | Spectrin repeat containing, nuclear envelope 2 [Source:HGNC Symbol;Acc:17084] | |
| SYNGAP1 | Synaptic Ras gtpase activating protein 1 [Source:HGNC Symbol;Acc:11497] | |
| SYNGR1 | Synaptogyrin 1 [Source:HGNC Symbol;Acc:11498] | |
| SYNJ1 | Synaptojanin 1 [Source:HGNC Symbol;Acc:11503] | |
| SYNJ2 | Synaptojanin 2 [Source:HGNC Symbol;Acc:11504] | |
| SYNJ2BP | Synaptojanin 2 binding protein [Source:HGNC Symbol;Acc:18955] | |
| SYNM | Synemin, intermediate filament protein [Source:HGNC Symbol;Acc:24466] | |
| SYNPO | Synaptopodin [Source:HGNC Symbol;Acc:30672] | |
| SYNPO2 | Synaptopodin 2 [Source:HGNC Symbol;Acc:17732] | |
| SYNPO2L | Synaptopodin 2-like [Source:HGNC Symbol;Acc:23532] | |
| SYNRG | Synergine, gamma [Source:HGNC Symbol;Acc:557] | |
| SYP | Synaptophysin [Source:HGNC Symbol;Acc:11506] | |
| SYT1 | Synaptotagmin I [Source:HGNC Symbol;Acc:11509] | |
| SYT11 | Synaptotagmin XI [Source:HGNC Symbol;Acc:19239] | |
| SYT16 | Synaptotagmin XVI [Source:HGNC Symbol;Acc:23142] | |

| | | |
|----------------|--|---|
| SYT17 | Synaptotagmin XVII [Source:HGNC Symbol;Acc:24119] | |
| SYT5 | Synaptotagmin V [Source:HGNC Symbol;Acc:11513] | |
| SYT7 | Synaptotagmin VII [Source:HGNC Symbol;Acc:11514] | |
| SYTL2 | Synaptotagmin-like 2 [Source:HGNC Symbol;Acc:15585] | |
| SYTL3 | Synaptotagmin-like 3 [Source:HGNC Symbol;Acc:15587] | |
| SYTL4 | Synaptotagmin-like 4 [Source:HGNC Symbol;Acc:15588] | |
| T | T, brachyury homolog (mouse) [Source:HGNC Symbol;Acc:11515] | |
| TAB1 | TGF-beta activated kinase 1/MAP3K7 binding protein 1 [Source:HGNC Symbol;Acc:18157] | |
| TACC1 | Transforming, acidic coiled-coil containing protein 1 [Source:HGNC Symbol;Acc:11522] | |
| TACC2 | Transforming, acidic coiled-coil containing protein 2 [Source:HGNC Symbol;Acc:11523] | |
| TACSTD2 | Tumor-associated calcium signal transducer 2 [Source:HGNC Symbol;Acc:11530] | |
| TAF1 | TAF1 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 250kda [Source:HGNC Symbol;Acc:11535] | |
| TAF11 | TAF11 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 28kda [Source:HGNC Symbol;Acc:11544] | |
| TAF12 | TAF12 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 20kda [Source:HGNC Symbol;Acc:11545] | |
| TAF15 | TAF15 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 68kda [Source:HGNC Symbol;Acc:11547] | √ |
| TAF1C | TATA box binding protein (TBP)-associated factor, RNA polymerase I, C, 110kda [Source:HGNC Symbol;Acc:11534] | |
| TAF1D | TATA box binding protein (TBP)-associated factor, RNA polymerase I, D, 41kda [Source:HGNC Symbol;Acc:28759] | |
| TAF4 | TAF4 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 135kda [Source:HGNC Symbol;Acc:11537] | |
| TAF5 | TAF5 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 100kda [Source:HGNC Symbol;Acc:11539] | |
| TAF5L | TAF5-like RNA polymerase II, p300/CBP-associated factor (PCAF)-associated factor, 65kda [Source:HGNC Symbol;Acc:17304] | |

| | | |
|-----------------|--|---|
| TAF6 | TAF6 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 80kda [Source:HGNC Symbol;Acc:11540] | |
| TAF9 | TAF9 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 32kda [Source:HGNC Symbol;Acc:11542] | |
| TAL1 | T-cell acute lymphocytic leukemia 1 [Source:HGNC Symbol;Acc:11556] | √ |
| TALDO1 | Transaldolase 1 [Source:HGNC Symbol;Acc:11559] | |
| TANC2 | Tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 2 [Source:HGNC Symbol;Acc:30212] | |
| TAOK1 | TAO kinase 1 [Source:HGNC Symbol;Acc:29259] | |
| TAOK2 | TAO kinase 2 [Source:HGNC Symbol;Acc:16835] | |
| TAP1 | Transporter 1, ATP-binding cassette, sub-family B (MDR/TAP) [Source:HGNC Symbol;Acc:43] | |
| TAPBP | TAP binding protein (tapasin) [Source:HGNC Symbol;Acc:11566] | |
| TARBP1 | TAR (HIV-1) RNA binding protein 1 [Source:HGNC Symbol;Acc:11568] | |
| TARBP2 | TAR (HIV-1) RNA binding protein 2 [Source:HGNC Symbol;Acc:11569] | |
| TAS1R1 | Taste receptor, type 1, member 1 [Source:HGNC Symbol;Acc:14448] | |
| TAS2R1 | Taste receptor, type 2, member 1 [Source:HGNC Symbol;Acc:14909] | |
| TAS2R3 | Taste receptor, type 2, member 3 [Source:HGNC Symbol;Acc:14910] | |
| TAS2R38 | Taste receptor, type 2, member 38 [Source:HGNC Symbol;Acc:9584] | |
| TAS2R39 | Taste receptor, type 2, member 39 [Source:HGNC Symbol;Acc:18886] | |
| TAS2R40 | Taste receptor, type 2, member 40 [Source:HGNC Symbol;Acc:18885] | |
| TAS2R42 | Taste receptor, type 2, member 42 [Source:HGNC Symbol;Acc:18888] | |
| TASP1 | Taspase, threonine aspartase, 1 [Source:HGNC Symbol;Acc:15859] | |
| TATDN3 | Tatd dnase domain containing 3 [Source:HGNC Symbol;Acc:27010] | |
| TAZ | Tafazzin [Source:HGNC Symbol;Acc:11577] | |
| TBC1D1 | TBC1 (tre-2/USP6, BUB2, cdc16) domain family, member 1 [Source:HGNC Symbol;Acc:11578] | |
| TBC1D10B | TBC1 domain family, member 10B [Source:HGNC Symbol;Acc:24510] | |
| TBC1D14 | TBC1 domain family, member 14 [Source:HGNC Symbol;Acc:29246] | |
| TBC1D16 | TBC1 domain family, member 16 [Source:HGNC Symbol;Acc:28356] | |
| TBC1D19 | TBC1 domain family, member 19 [Source:HGNC Symbol;Acc:25624] | |
| TBC1D21 | TBC1 domain family, member 21 [Source:HGNC Symbol;Acc:28536] | |
| TBC1D22A | TBC1 domain family, member 22A [Source:HGNC Symbol;Acc:1309] | |

| | | |
|----------------|---|---|
| TBC1D24 | TBC1 domain family, member 24 [Source:HGNC Symbol;Acc:29203] | |
| TBC1D26 | TBC1 domain family, member 26 [Source:HGNC Symbol;Acc:28745] | |
| TBC1D28 | TBC1 domain family, member 28 [Source:HGNC Symbol;Acc:26858] | |
| TBC1D2B | TBC1 domain family, member 2B [Source:HGNC Symbol;Acc:29183] | |
| TBC1D3 | TBC1 domain family, member 3 [Source:HGNC Symbol;Acc:19031] | |
| TBC1D3B | TBC1 domain family, member 3B [Source:HGNC Symbol;Acc:27011] | |
| TBC1D3C | TBC1 domain family, member 3C [Source:HGNC Symbol;Acc:24889] | |
| TBC1D3G | TBC1 domain family, member 3G [Source:HGNC Symbol;Acc:29860] | |
| TBC1D4 | TBC1 domain family, member 4 [Source:HGNC Symbol;Acc:19165] | |
| TBC1D5 | TBC1 domain family, member 5 [Source:HGNC Symbol;Acc:19166] | |
| TBC1D8 | TBC1 domain family, member 8 (with GRAM domain) [Source:HGNC Symbol;Acc:17791] | |
| TBC1D8B | TBC1 domain family, member 8B (with GRAM domain) [Source:HGNC Symbol;Acc:24715] | |
| TBC1D9 | TBC1 domain family, member 9 (with GRAM domain) [Source:HGNC Symbol;Acc:21710] | |
| TBC1D9B | TBC1 domain family, member 9B (with GRAM domain) [Source:HGNC Symbol;Acc:29097] | |
| TBCD | Tubulin folding cofactor D [Source:HGNC Symbol;Acc:11581] | |
| TBCEL | Tubulin folding cofactor E-like [Source:HGNC Symbol;Acc:28115] | |
| TBK1 | TANK-binding kinase 1 [Source:HGNC Symbol;Acc:11584] | |
| TBL1X | Transducin (beta)-like 1X-linked [Source:HGNC Symbol;Acc:11585] | |
| TBL1XR1 | Transducin (beta)-like 1 X-linked receptor 1 [Source:HGNC Symbol;Acc:29529] | √ |
| TBX10 | T-box 10 [Source:HGNC Symbol;Acc:11593] | |
| TBX15 | T-box 15 [Source:HGNC Symbol;Acc:11594] | |
| TBX19 | T-box 19 [Source:HGNC Symbol;Acc:11596] | |
| TBX22 | T-box 22 [Source:HGNC Symbol;Acc:11600] | |
| TBX4 | T-box 4 [Source:HGNC Symbol;Acc:11603] | |
| TBXAS1 | Thromboxane A synthase 1 (platelet) [Source:HGNC Symbol;Acc:11609] | |
| TCEA2 | Transcription elongation factor A (SII), 2 [Source:HGNC Symbol;Acc:11614] | |

| | | |
|-----------------|---|---|
| TCEANC | Transcription elongation factor A (SII) N-terminal and central domain containing [Source:HGNC Symbol;Acc:28277] | |
| TCERG1 | Transcription elongation regulator 1 [Source:HGNC Symbol;Acc:15630] | |
| TCERG1L | Transcription elongation regulator 1-like [Source:HGNC Symbol;Acc:23533] | |
| TCF20 | Transcription factor 20 (AR1) [Source:HGNC Symbol;Acc:11631] | |
| TCF21 | Transcription factor 21 [Source:HGNC Symbol;Acc:11632] | |
| TCF25 | Transcription factor 25 (basic helix-loop-helix) [Source:HGNC Symbol;Acc:29181] | |
| TCF4 | Transcription factor 4 [Source:HGNC Symbol;Acc:11634] | |
| TCHHL1 | Trichohyalin-like 1 [Source:HGNC Symbol;Acc:31796] | |
| TCL1A | T-cell leukemia/lymphoma 1A [Source:HGNC Symbol;Acc:11648] | √ |
| TCL1B | T-cell leukemia/lymphoma 1B [Source:HGNC Symbol;Acc:11649] | |
| TCOF1 | Treacher Collins-Franceschetti syndrome 1 [Source:HGNC Symbol;Acc:11654] | |
| TCP11 | T-complex 11 homolog (mouse) [Source:HGNC Symbol;Acc:11658] | |
| TCTEX1D1 | Tctex1 domain containing 1 [Source:HGNC Symbol;Acc:26882] | |
| TCTN1 | Tectonic family member 1 [Source:HGNC Symbol;Acc:26113] | |
| TCTN2 | Tectonic family member 2 [Source:HGNC Symbol;Acc:25774] | |
| TCTN3 | Tectonic family member 3 [Source:HGNC Symbol;Acc:24519] | |
| TDRD1 | Tudor domain containing 1 [Source:HGNC Symbol;Acc:11712] | |
| TDRD12 | Tudor domain containing 12 [Source:HGNC Symbol;Acc:25044] | |
| TDRD7 | Tudor domain containing 7 [Source:HGNC Symbol;Acc:30831] | |
| TDRD9 | Tudor domain containing 9 [Source:HGNC Symbol;Acc:20122] | |
| TDRKH | Tudor and KH domain containing [Source:HGNC Symbol;Acc:11713] | |
| TEAD4 | TEA domain family member 4 [Source:HGNC Symbol;Acc:11717] | |
| TECPR1 | Tectonin beta-propeller repeat containing 1 [Source:HGNC Symbol;Acc:22214] | |
| TECPR2 | Tectonin beta-propeller repeat containing 2 [Source:HGNC Symbol;Acc:19957] | |
| TECTA | Tectorin alpha [Source:HGNC Symbol;Acc:11720] | |
| TEK | TEK tyrosine kinase, endothelial [Source:HGNC Symbol;Acc:11724] | |
| TEKT1 | Tektin 1 [Source:HGNC Symbol;Acc:15534] | |

| | | |
|----------------|---|---|
| TEP1 | Telomerase-associated protein 1 [Source:HGNC Symbol;Acc:11726] | |
| TERF1 | Telomeric repeat binding factor (NIMA-interacting) 1 [Source:HGNC Symbol;Acc:11728] | |
| TERT | Telomerase reverse transcriptase [Source:HGNC Symbol;Acc:11730] | √ |
| TET2 | Tet oncogene family member 2 [Source:HGNC Symbol;Acc:25941] | √ |
| TEX10 | Testis expressed 10 [Source:HGNC Symbol;Acc:25988] | |
| TEX14 | Testis expressed 14 [Source:HGNC Symbol;Acc:11737] | |
| TEX15 | Testis expressed 15 [Source:HGNC Symbol;Acc:11738] | |
| TEX2 | Testis expressed 2 [Source:HGNC Symbol;Acc:30884] | |
| TEX28 | Testis expressed 28 [Source:HGNC Symbol;Acc:2563] | |
| TEX28P1 | Testis expressed 28 pseudogene 1 [Source:HGNC Symbol;Acc:33356] | |
| TEX28P2 | Testis expressed 28 pseudogene 2 [Source:HGNC Symbol;Acc:33357] | |
| TF | Transferrin [Source:HGNC Symbol;Acc:11740] | |
| TFAM | Transcription factor A, mitochondrial [Source:HGNC Symbol;Acc:11741] | |
| TFB1M | Transcription factor B1, mitochondrial [Source:HGNC Symbol;Acc:17037] | |
| TFCP2L1 | Transcription factor CP2-like 1 [Source:HGNC Symbol;Acc:17925] | |
| TFDP2 | Transcription factor Dp-2 (E2F dimerization partner 2) [Source:HGNC Symbol;Acc:11751] | |
| TFF2 | Trefoil factor 2 [Source:HGNC Symbol;Acc:11756] | |
| TFPI | Tissue factor pathway inhibitor (lipoprotein-associated coagulation inhibitor) [Source:HGNC Symbol;Acc:11760] | |
| TFPI2 | Tissue factor pathway inhibitor 2 [Source:HGNC Symbol;Acc:11761] | |
| TFR2 | Transferrin receptor 2 [Source:HGNC Symbol;Acc:11762] | |
| TFRC | Transferrin receptor (p90, CD71) [Source:HGNC Symbol;Acc:11763] | √ |
| TG | Thyroglobulin [Source:HGNC Symbol;Acc:11764] | |
| TGFA | Transforming growth factor, alpha [Source:HGNC Symbol;Acc:11765] | |
| TGFBI | Transforming growth factor, beta-induced, 68kda [Source:HGNC Symbol;Acc:11771] | |
| TGFBR1 | Transforming growth factor, beta receptor 1 [Source:HGNC Symbol;Acc:11772] | |
| TGFBR3 | Transforming growth factor, beta receptor III [Source:HGNC Symbol;Acc:11774] | |

| | | |
|-----------------|--|---|
| TGFBRAP1 | Transforming growth factor, beta receptor associated protein 1 [Source:HGNC Symbol;Acc:16836] | |
| TGIF2 | TGFB-induced factor homeobox 2 [Source:HGNC Symbol;Acc:15764] | |
| TGM1 | Transglutaminase 1 (K polypeptide epidermal type I, protein-glutamine-gamma-glutamyltransferase) [Source:HGNC Symbol;Acc:11777] | |
| TGM3 | Transglutaminase 3 (E polypeptide, protein-glutamine-gamma-glutamyltransferase) [Source:HGNC Symbol;Acc:11779] | |
| TGM4 | Transglutaminase 4 (prostate) [Source:HGNC Symbol;Acc:11780] | |
| TGM5 | Transglutaminase 5 [Source:HGNC Symbol;Acc:11781] | |
| TGM6 | Transglutaminase 6 [Source:HGNC Symbol;Acc:16255] | |
| TH1L | TH1-like (Drosophila) [Source:HGNC Symbol;Acc:15934] | |
| THADA | Thyroid adenoma associated [Source:HGNC Symbol;Acc:19217] | |
| THAP8 | THAP domain containing 8 [Source:HGNC Symbol;Acc:23191] | |
| THAP9 | THAP domain containing 9 [Source:HGNC Symbol;Acc:23192] | |
| THBD | Thrombomodulin [Source:HGNC Symbol;Acc:11784] | |
| THBS3 | Thrombospondin 3 [Source:HGNC Symbol;Acc:11787] | |
| THBS4 | Thrombospondin 4 [Source:HGNC Symbol;Acc:11788] | |
| THNSL1 | Threonine synthase-like 1 (S. Cerevisiae) [Source:HGNC Symbol;Acc:26160] | |
| THNSL2 | Threonine synthase-like 2 (S. Cerevisiae) [Source:HGNC Symbol;Acc:25602] | |
| THOC2 | THO complex 2 [Source:HGNC Symbol;Acc:19073] | |
| THOC5 | THO complex 5 [Source:HGNC Symbol;Acc:19074] | |
| THOC6 | THO complex 6 homolog (Drosophila) [Source:HGNC Symbol;Acc:28369] | |
| THRA | Thyroid hormone receptor, alpha (erythroblastic leukemia viral (v-erb-a) oncogene homolog, avian) [Source:HGNC Symbol;Acc:11796] | |
| THRAP3 | Thyroid hormone receptor associated protein 3 [Source:HGNC Symbol;Acc:22964] | √ |
| THSD4 | Thrombospondin, type I, domain containing 4 [Source:HGNC Symbol;Acc:25835] | |
| THSD7A | Thrombospondin, type I, domain containing 7A [Source:HGNC Symbol;Acc:22207] | |

| | | |
|-----------------|--|--|
| THSD7B | Thrombospondin, type I, domain containing 7B [Source:HGNC Symbol;Acc:29348] | |
| THUMPD1 | THUMP domain containing 1 [Source:HGNC Symbol;Acc:23807] | |
| THUMPD3 | THUMP domain containing 3 [Source:HGNC Symbol;Acc:24493] | |
| TIAF1 | TGFB1-induced anti-apoptotic factor 1 [Source:HGNC Symbol;Acc:11803] | |
| TIAL1 | TIA1 cytotoxic granule-associated RNA binding protein-like 1 [Source:HGNC Symbol;Acc:11804] | |
| TIAM2 | T-cell lymphoma invasion and metastasis 2 [Source:HGNC Symbol;Acc:11806] | |
| TIE1 | Tyrosine kinase with immunoglobulin-like and EGF-like domains 1 [Source:HGNC Symbol;Acc:11809] | |
| TIFA | TRAF-interacting protein with forkhead-associated domain [Source:HGNC Symbol;Acc:19075] | |
| TIFAB | TRAF-interacting protein with forkhead-associated domain, family member B [Source:HGNC Symbol;Acc:34024] | |
| TIGD1L2 | Tigger transposable element derived 1-like 2 [Source:HGNC Symbol;Acc:31424] | |
| TIGD6 | Tigger transposable element derived 6 [Source:HGNC Symbol;Acc:18332] | |
| TIGIT | T cell immunoreceptor with Ig and ITIM domains [Source:HGNC Symbol;Acc:26838] | |
| TIMELESS | Timeless homolog (Drosophila) [Source:HGNC Symbol;Acc:11813] | |
| TIMM17A | Translocase of inner mitochondrial membrane 17 homolog A (yeast) [Source:HGNC Symbol;Acc:17315] | |
| TIMM22 | Translocase of inner mitochondrial membrane 22 homolog (yeast) [Source:HGNC Symbol;Acc:17317] | |
| TIMM44 | Translocase of inner mitochondrial membrane 44 homolog (yeast) [Source:HGNC Symbol;Acc:17316] | |
| TIMP1 | TIMP metalloproteinase inhibitor 1 [Source:HGNC Symbol;Acc:11820] | |
| TIMP3 | TIMP metalloproteinase inhibitor 3 [Source:HGNC Symbol;Acc:11822] | |
| TINAG | Tubulointerstitial nephritis antigen [Source:HGNC Symbol;Acc:14599] | |
| TIPARP | TCDD-inducible poly(ADP-ribose) polymerase [Source:HGNC Symbol;Acc:23696] | |
| TIPIN | TIMELESS interacting protein [Source:HGNC Symbol;Acc:30750] | |

| | | |
|----------------|---|--|
| TJAP1 | Tight junction associated protein 1 (peripheral) [Source:HGNC Symbol;Acc:17949] | |
| TJP1 | Tight junction protein 1 (zona occludens 1) [Source:HGNC Symbol;Acc:11827] | |
| TJP2 | Tight junction protein 2 (zona occludens 2) [Source:HGNC Symbol;Acc:11828] | |
| TK2 | Thymidine kinase 2, mitochondrial [Source:HGNC Symbol;Acc:11831] | |
| TLE1 | Transducin-like enhancer of split 1 (E(sp1) homolog, Drosophila) [Source:HGNC Symbol;Acc:11837] | |
| TLE3 | Transducin-like enhancer of split 3 (E(sp1) homolog, Drosophila) [Source:HGNC Symbol;Acc:11839] | |
| TLE4 | Transducin-like enhancer of split 4 (E(sp1) homolog, Drosophila) [Source:HGNC Symbol;Acc:11840] | |
| TLK1 | Tousled-like kinase 1 [Source:HGNC Symbol;Acc:11841] | |
| TLL1 | Tolloid-like 1 [Source:HGNC Symbol;Acc:11843] | |
| TLL2 | Tolloid-like 2 [Source:HGNC Symbol;Acc:11844] | |
| TLN1 | Talin 1 [Source:HGNC Symbol;Acc:11845] | |
| TLN2 | Talin 2 [Source:HGNC Symbol;Acc:15447] | |
| TLR6 | Toll-like receptor 6 [Source:HGNC Symbol;Acc:16711] | |
| TM2D3 | TM2 domain containing 3 | |
| TM4SF18 | Transmembrane 4 L six family member 18 | |
| TM7SF3 | Transmembrane 7 superfamily member 3 | |
| TM9SF1 | Transmembrane 9 superfamily member 1 | |
| TM9SF3 | Transmembrane 9 superfamily member 3 | |
| TM9SF4 | Transmembrane 9 superfamily protein member 4 | |
| TMC1 | Transmembrane channel-like 1 | |
| TMC2 | Transmembrane channel-like 2 | |
| TMC4 | Transmembrane channel-like 4 | |
| TMC5 | Transmembrane channel-like 5 | |
| TMC8 | Transmembrane channel-like 8 | |
| TMCC2 | Transmembrane and coiled-coil domain family 2 | |
| TMCC3 | Transmembrane and coiled-coil domain family 3 | |
| TMCO6 | Transmembrane and coiled-coil domains 6 | |

| | | |
|-----------------|--|--|
| TMED10 | Transmembrane emp24-like trafficking protein 10 (yeast) | |
| TMED3 | Transmembrane emp24 protein transport domain containing 3 | |
| TMED5 | Transmembrane emp24 protein transport domain containing 5 | |
| TMED6 | Transmembrane emp24 protein transport domain containing 6 | |
| TMEFF2 | Transmembrane protein with EGF-like and two follistatin-like domains 2 | |
| TMEM101 | Transmembrane protein 101 | |
| TMEM106A | Transmembrane protein 106A | |
| TMEM107 | Transmembrane protein 107 | |
| TMEM108 | Transmembrane protein 108 | |
| TMEM110 | Transmembrane protein 110 | |
| TMEM116 | Transmembrane protein 116 | |
| TMEM120B | Transmembrane protein 120B | |
| TMEM127 | Transmembrane protein 127 | |
| TMEM130 | Transmembrane protein 130 | |
| TMEM132A | Transmembrane protein 132A | |
| TMEM132B | Transmembrane protein 132B | |
| TMEM132C | Transmembrane protein 132C | |
| TMEM132E | Transmembrane protein 132E | |
| TMEM136 | Transmembrane protein 136 | |
| TMEM147 | Transmembrane protein 147 | |
| TMEM150A | Transmembrane protein 150A | |
| TMEM151B | Transmembrane protein 151B | |
| TMEM154 | Transmembrane protein 154 | |
| TMEM156 | Transmembrane protein 156 | |
| TMEM163 | Transmembrane protein 163 | |
| TMEM164 | Transmembrane protein 164 | |
| TMEM165 | Transmembrane protein 165 | |
| TMEM168 | Transmembrane protein 168 | |
| TMEM169 | Transmembrane protein 169 | |
| TMEM170B | Transmembrane protein 170B | |
| TMEM173 | Transmembrane protein 173 | |
| TMEM174 | Transmembrane protein 174 | |
| TMEM176A | Transmembrane protein 176A | |

| | | |
|-----------------|----------------------------|--|
| TMEM181 | Transmembrane protein 181 | |
| TMEM183A | Transmembrane protein 183A | |
| TMEM184B | Transmembrane protein 184B | |
| TMEM184B | Transmembrane protein 184B | |
| TMEM187 | Transmembrane protein 187 | |
| TMEM188 | Transmembrane protein 188 | |
| TMEM189 | Transmembrane protein 189 | |
| TMEM192 | Transmembrane protein 192 | |
| TMEM196 | Transmembrane protein 196 | |
| TMEM20 | Transmembrane protein 20 | |
| TMEM201 | Transmembrane protein 201 | |
| TMEM203 | Transmembrane protein 203 | |
| TMEM206 | Transmembrane protein 206 | |
| TMEM208 | Transmembrane protein 208 | |
| TMEM214 | Transmembrane protein 214 | |
| TMEM218 | Transmembrane protein 218 | |
| TMEM220 | Transmembrane protein 220 | |
| TMEM229A | Transmembrane protein 229A | |
| TMEM25 | Transmembrane protein 25 | |
| TMEM26 | Transmembrane protein 26 | |
| TMEM30A | Transmembrane protein 30A | |
| TMEM37 | Transmembrane protein 37 | |
| TMEM39A | Transmembrane protein 39A | |
| TMEM41A | Transmembrane protein 41A | |
| TMEM42 | Transmembrane protein 42 | |
| TMEM43 | Transmembrane protein 43 | |
| TMEM48 | Transmembrane protein 48 | |
| TMEM49 | Transmembrane protein 49 | |
| TMEM50B | Transmembrane protein 50B | |
| TMEM63A | Transmembrane protein 63A | |
| TMEM64 | Transmembrane protein 64 | |
| TMEM68 | Transmembrane protein 68 | |
| TMEM72 | Transmembrane protein 72 | |

| | | |
|------------------|---|---|
| TMEM74 | Transmembrane protein 74 | |
| TMEM87A | Transmembrane protein 87A | |
| TMEM87B | Transmembrane protein 87B | |
| TMEM8A | Transmembrane protein 8A | |
| TMEM8B | Transmembrane protein 8B | |
| TMEM92 | Transmembrane protein 92 | |
| TMEM95 | Transmembrane protein 95 | |
| TMEM98 | Transmembrane protein 98 | |
| TMF1 | TATA element modulatory factor 1 | |
| TMOD1 | Tropomodulin 1 | |
| TMOD3 | Tropomodulin 3 (ubiquitous) Symbol;Acc:11873] | |
| TMPRSS15 | Transmembrane protease, serine 15 [Source:HGNC Symbol;Acc:9490] | |
| TMPRSS2 | Transmembrane protease, serine 2 [Source:HGNC Symbol;Acc:11876] | √ |
| TMPRSS6 | Transmembrane protease, serine 6 [Source:HGNC Symbol;Acc:16517] | |
| TMTC1 | Transmembrane and tetratricopeptide repeat containing 1 [Source:HGNC Symbol;Acc:24099] | |
| TMTC2 | Transmembrane and tetratricopeptide repeat containing 2 [Source:HGNC Symbol;Acc:25440] | |
| TMTC4 | Transmembrane and tetratricopeptide repeat containing 4 [Source:HGNC Symbol;Acc:25904] | |
| TMX4 | Thioredoxin-related transmembrane protein 4 [Source:HGNC Symbol;Acc:25237] | |
| TNC | Tenascin C [Source:HGNC Symbol;Acc:5318] | |
| TNFAIP1 | Tumor necrosis factor, alpha-induced protein 1 (endothelial) [Source:HGNC Symbol;Acc:11894] | |
| TNFAIP3 | Tumor necrosis factor, alpha-induced protein 3 [Source:HGNC Symbol;Acc:11896] | |
| TNFAIP8L1 | Tumor necrosis factor, alpha-induced protein 8-like 1 [Source:HGNC Symbol;Acc:28279] | |
| TNFAIP8L2 | Tumor necrosis factor, alpha-induced protein 8-like 2 [Source:HGNC Symbol;Acc:26277] | |
| TNFAIP8L3 | Tumor necrosis factor, alpha-induced protein 8-like 3 [Source:HGNC Symbol;Acc:20620] | |

| | | |
|------------------|--|---|
| TNFRSF10D | Tumor necrosis factor receptor superfamily, member 10d, decoy with truncated death domain [Source:HGNC Symbol;Acc:11907] | |
| TNFRSF11A | Tumor necrosis factor receptor superfamily, member 11a, NFkB activator [Source:HGNC Symbol;Acc:11908] | |
| TNFRSF11B | Tumor necrosis factor receptor superfamily, member 11b [Source:HGNC Symbol;Acc:11909] | |
| TNFRSF14 | Tumor necrosis factor receptor superfamily, member 14 (herpesvirus entry mediator) [Source:HGNC Symbol;Acc:11912] | √ |
| TNFRSF1A | Tumor necrosis factor receptor superfamily, member 1A [Source:HGNC Symbol;Acc:11916] | |
| TNFRSF21 | Tumor necrosis factor receptor superfamily, member 21 [Source:HGNC Symbol;Acc:13469] | |
| TNFRSF25 | Tumor necrosis factor receptor superfamily, member 25 [Source:HGNC Symbol;Acc:11910] | |
| TNFRSF6B | Tumor necrosis factor receptor superfamily, member 6b, decoy [Source:HGNC Symbol;Acc:11921] | |
| TNFSF11 | Tumor necrosis factor (ligand) superfamily, member 11 [Source:HGNC Symbol;Acc:11926] | |
| TNFSF14 | Tumor necrosis factor (ligand) superfamily, member 14 [Source:HGNC Symbol;Acc:11930] | |
| TNFSF8 | Tumor necrosis factor (ligand) superfamily, member 8 [Source:HGNC Symbol;Acc:11938] | |
| TNIP2 | TNFAIP3 interacting protein 2 [Source:HGNC Symbol;Acc:19118] | |
| TNK1 | Tyrosine kinase, non-receptor, 1 [Source:HGNC Symbol;Acc:11940] | |
| TNK2 | Tyrosine kinase, non-receptor, 2 [Source:HGNC Symbol;Acc:19297] | |
| TNKS | Tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase [Source:HGNC Symbol;Acc:11941] | |
| TNN | Tenascin N [Source:HGNC Symbol;Acc:22942] | |
| TNNI3 | Troponin I type 3 (cardiac) [Source:HGNC Symbol;Acc:11947] | |
| TNPO1 | Transportin 1 [Source:HGNC Symbol;Acc:6401] | |
| TNPO3 | Transportin 3 [Source:HGNC Symbol;Acc:17103] | |
| TNR | Tenascin R (restrictin, janusin) [Source:HGNC Symbol;Acc:11953] | |
| TNRC18 | Trinucleotide repeat containing 18 [Source:HGNC Symbol;Acc:11962] | |

| | | |
|-----------------|---|---|
| TNRC6A | Trinucleotide repeat containing 6A [Source:HGNC Symbol;Acc:11969] | |
| TNRC6B | Trinucleotide repeat containing 6B [Source:HGNC Symbol;Acc:29190] | |
| TNRC6C | Trinucleotide repeat containing 6C [Source:HGNC Symbol;Acc:29318] | |
| TNS1 | Tensin 1 [Source:HGNC Symbol;Acc:11973] | |
| TNS3 | Tensin 3 [Source:HGNC Symbol;Acc:21616] | |
| TNXB | Tenascin XB [Source:HGNC Symbol;Acc:11976] | |
| TOB2 | Transducer of ERBB2, 2 [Source:HGNC Symbol;Acc:11980] | |
| TOE1 | Target of EGR1, member 1 (nuclear) [Source:HGNC Symbol;Acc:15954] | |
| TOLLIP | Toll interacting protein [Source:HGNC Symbol;Acc:16476] | |
| TOM1 | Target of myb1 (chicken) [Source:HGNC Symbol;Acc:11982] | |
| TOM1L1 | Target of myb1 (chicken)-like 1 [Source:HGNC Symbol;Acc:11983] | |
| TOM1L2 | Target of myb1-like 2 (chicken) [Source:HGNC Symbol;Acc:11984] | |
| TOMM22 | Translocase of outer mitochondrial membrane 22 homolog (yeast) [Source:HGNC Symbol;Acc:18002] | |
| TOMM34 | Translocase of outer mitochondrial membrane 34 [Source:HGNC Symbol;Acc:15746] | |
| TOMM40L | Translocase of outer mitochondrial membrane 40 homolog (yeast)-like [Source:HGNC Symbol;Acc:25756] | |
| TOMM6 | Translocase of outer mitochondrial membrane 6 homolog (yeast) [Source:HGNC Symbol;Acc:34528] | |
| TONSL | Tonsoku-like, DNA repair protein [Source:HGNC Symbol;Acc:7801] | |
| TOP1 | Topoisomerase (DNA) I [Source:HGNC Symbol;Acc:11986] | √ |
| TOP1MT | Topoisomerase (DNA) I, mitochondrial [Source:HGNC Symbol;Acc:29787] | |
| TOP3B | Topoisomerase (DNA) III beta [Source:HGNC Symbol;Acc:11993] | |
| TOR1AIP2 | Torsin A interacting protein 2 [Source:HGNC Symbol;Acc:24055] | |
| TOR1B | Torsin family 1, member B (torsin B) [Source:HGNC Symbol;Acc:11995] | |
| TOR3A | Torsin family 3, member A [Source:HGNC Symbol;Acc:11997] | |
| TOX | Thymocyte selection-associated high mobility group box [Source:HGNC Symbol;Acc:18988] | |
| TOX4 | TOX high mobility group box family member 4 [Source:HGNC Symbol;Acc:20161] | |
| TP53BP1 | Tumor protein p53 binding protein 1 [Source:HGNC Symbol;Acc:11999] | |
| TP53BP2 | Tumor protein p53 binding protein, 2 [Source:HGNC Symbol;Acc:12000] | |

| | | |
|-----------------|---|---|
| TP53INP1 | Tumor protein p53 inducible nuclear protein 1 [Source:HGNC Symbol;Acc:18022] | |
| TPCN1 | Two pore segment channel 1 [Source:HGNC Symbol;Acc:18182] | |
| TPD52L1 | Tumor protein D52-like 1 [Source:HGNC Symbol;Acc:12006] | |
| TPD52L2 | Tumor protein D52-like 2 [Source:HGNC Symbol;Acc:12007] | |
| TPH2 | Tryptophan hydroxylase 2 [Source:HGNC Symbol;Acc:20692] | |
| TPK1 | Thiamin pyrophosphokinase 1 [Source:HGNC Symbol;Acc:17358] | |
| TPM3 | Tropomyosin 3 [Source:HGNC Symbol;Acc:12012] | |
| TPMT | Thiopurine S-methyltransferase [Source:HGNC Symbol;Acc:12014] | |
| TPP1 | Tripeptidyl peptidase I [Source:HGNC Symbol;Acc:2073] | |
| TPRA1 | Transmembrane protein, adipocyte associated 1 [Source:HGNC Symbol;Acc:30413] | |
| TPRG1 | Tumor protein p63 regulated 1 [Source:HGNC Symbol;Acc:24759] | |
| TPRG1L | Tumor protein p63 regulated 1-like [Source:HGNC Symbol;Acc:27007] | |
| TPRXL | Tetra-peptide repeat homeobox-like [Source:HGNC Symbol;Acc:32178] | |
| TPST2 | Tyrosylprotein sulfotransferase 2 [Source:HGNC Symbol;Acc:12021] | |
| TPTE2P1 | Transmembrane phosphoinositide 3-phosphatase and tensin homolog 2 pseudogene 1 [Source:HGNC Symbol;Acc:35196] | |
| TRA2A | Transformer 2 alpha homolog (Drosophila) [Source:HGNC Symbol;Acc:16645] | |
| TRAF1 | TNF receptor-associated factor 1 [Source:HGNC Symbol;Acc:12031] | |
| TRAF4 | TNF receptor-associated factor 4 [Source:HGNC Symbol;Acc:12034] | |
| TRAF7 | TNF receptor-associated factor 7 [Source:HGNC Symbol;Acc:20456] | √ |
| TRAK1 | Trafficking protein, kinesin binding 1 [Source:HGNC Symbol;Acc:29947] | |
| TRAM1L1 | Translocation associated membrane protein 1-like 1 [Source:HGNC Symbol;Acc:28371] | |
| TRAM2 | Translocation associated membrane protein 2 [Source:HGNC Symbol;Acc:16855] | |
| TRANK1 | Tetratricopeptide repeat and ankyrin repeat containing 1 [Source:HGNC Symbol;Acc:29011] | |
| TRAP1 | TNF receptor-associated protein 1 [Source:HGNC Symbol;Acc:16264] | |
| TRAPPC10 | Trafficking protein particle complex 10 [Source:HGNC Symbol;Acc:11868] | |
| TRDMT1 | Trna aspartic acid methyltransferase 1 [Source:HGNC Symbol;Acc:2977] | |

| | | |
|---------------------|--|---|
| TREML2 | Triggering receptor expressed on myeloid cells-like 2 [Source:HGNC Symbol;Acc:21092] | |
| TRERF1 | Transcriptional regulating factor 1 [Source:HGNC Symbol;Acc:18273] | |
| TREX1 | Three prime repair exonuclease 1 [Source:HGNC Symbol;Acc:12269] | |
| TRGV3 | T cell receptor gamma variable 3 [Source:HGNC Symbol;Acc:12288] | |
| TRGV5 | T cell receptor gamma variable 5 [Source:HGNC Symbol;Acc:12290] | |
| TRIM10 | Tripartite motif containing 10 [Source:HGNC Symbol;Acc:10072] | |
| TRIM11 | Tripartite motif containing 11 [Source:HGNC Symbol;Acc:16281] | |
| TRIM13 | Tripartite motif containing 13 [Source:HGNC Symbol;Acc:9976] | |
| TRIM14 | Tripartite motif containing 14 [Source:HGNC Symbol;Acc:16283] | |
| TRIM17 | Tripartite motif containing 17 [Source:HGNC Symbol;Acc:13430] | |
| TRIM22 | Tripartite motif containing 22 [Source:HGNC Symbol;Acc:16379] | |
| TRIM23 | Tripartite motif containing 23 [Source:HGNC Symbol;Acc:660] | |
| TRIM24 | Tripartite motif containing 24 [Source:HGNC Symbol;Acc:11812] | |
| TRIM26 | Tripartite motif containing 26 [Source:HGNC Symbol;Acc:12962] | |
| TRIM28 | Tripartite motif containing 28 [Source:HGNC Symbol;Acc:16384] | |
| TRIM3 | Tripartite motif containing 3 [Source:HGNC Symbol;Acc:10064] | |
| TRIM31 | Tripartite motif containing 31 [Source:HGNC Symbol;Acc:16289] | |
| TRIM33 | Tripartite motif containing 33 [Source:HGNC Symbol;Acc:16290] | √ |
| TRIM34 | Tripartite motif containing 34 [Source:HGNC Symbol;Acc:10063] | |
| TRIM35 | Tripartite motif containing 35 [Source:HGNC Symbol;Acc:16285] | |
| TRIM37 | Tripartite motif containing 37 [Source:HGNC Symbol;Acc:7523] | |
| TRIM39 | Tripartite motif containing 39 [Source:HGNC Symbol;Acc:10065] | |
| TRIM39-RPP21 | TRIM39-RPP21 readthrough [Source:HGNC Symbol;Acc:38845] | |
| TRIM43 | Tripartite motif containing 43 [Source:HGNC Symbol;Acc:19015] | |
| TRIM46 | Tripartite motif containing 46 [Source:HGNC Symbol;Acc:19019] | |
| TRIM48 | Tripartite motif containing 48 [Source:HGNC Symbol;Acc:19021] | |
| TRIM49 | Tripartite motif containing 49 [Source:HGNC Symbol;Acc:13431] | |
| TRIM49L2 | Tripartite motif containing 49-like 2 [Source:HGNC Symbol;Acc:38877] | |
| TRIM50 | Tripartite motif containing 50 [Source:HGNC Symbol;Acc:19017] | |
| TRIM55 | Tripartite motif containing 55 [Source:HGNC Symbol;Acc:14215] | |
| TRIM6 | Tripartite motif containing 6 [Source:HGNC Symbol;Acc:16277] | |

| | | |
|---------------------|--|---|
| TRIM62 | Tripartite motif containing 62 [Source:HGNC Symbol;Acc:25574] | |
| TRIM65 | Tripartite motif containing 65 [Source:HGNC Symbol;Acc:27316] | |
| TRIM66 | Tripartite motif containing 66 [Source:HGNC Symbol;Acc:29005] | |
| TRIM67 | Tripartite motif containing 67 [Source:HGNC Symbol;Acc:31859] | |
| TRIM6-TRIM34 | TRIM6-TRIM34 readthrough [Source:HGNC Symbol;Acc:33440] | |
| TRIM71 | Tripartite motif containing 71 [Source:HGNC Symbol;Acc:32669] | |
| TRIM72 | Tripartite motif containing 72 [Source:HGNC Symbol;Acc:32671] | |
| TRIM73 | Tripartite motif containing 73 [Source:HGNC Symbol;Acc:18162] | |
| TRIM74 | Tripartite motif containing 74 [Source:HGNC Symbol;Acc:17453] | |
| TRIM9 | Tripartite motif containing 9 [Source:HGNC Symbol;Acc:16288] | |
| TRIML2 | Tripartite motif family-like 2 [Source:HGNC Symbol;Acc:26378] | |
| TRIO | Triple functional domain (PTPRF interacting) [Source:HGNC Symbol;Acc:12303] | |
| TRIP11 | Thyroid hormone receptor interactor 11 [Source:HGNC Symbol;Acc:12305] | √ |
| TRIP6 | Thyroid hormone receptor interactor 6 [Source:HGNC Symbol;Acc:12311] | |
| TRIT1 | Trna isopentenyltransferase 1 [Source:HGNC Symbol;Acc:20286] | |
| TRMT1L | TRM1 trna methyltransferase 1-like [Source:HGNC Symbol;Acc:16782] | |
| TRMT61A | Trna methyltransferase 61 homolog A (S. Cerevisiae) [Source:HGNC Symbol;Acc:23790] | |
| TRMU | Trna 5-methylaminomethyl-2-thiouridylate methyltransferase [Source:HGNC Symbol;Acc:25481] | |
| TRNAU1AP | Trna selenocysteine 1 associated protein 1 [Source:HGNC Symbol;Acc:30813] | |
| TRO | Trophinin [Source:HGNC Symbol;Acc:12326] | |
| TRPA1 | Transient receptor potential cation channel, subfamily A, member 1 [Source:HGNC Symbol;Acc:497] | |
| TRPC4AP | Transient receptor potential cation channel, subfamily C, member 4 associated protein [Source:HGNC Symbol;Acc:16181] | |
| TRPC5 | Transient receptor potential cation channel, subfamily C, member 5 [Source:HGNC Symbol;Acc:12337] | |

| | | |
|----------------|--|---|
| TRPM1 | Transient receptor potential cation channel, subfamily M, member 1 [Source:HGNC Symbol;Acc:7146] | |
| TRPM2 | Transient receptor potential cation channel, subfamily M, member 2 [Source:HGNC Symbol;Acc:12339] | |
| TRPM3 | Transient receptor potential cation channel, subfamily M, member 3 [Source:HGNC Symbol;Acc:17992] | |
| TRPM5 | Transient receptor potential cation channel, subfamily M, member 5 [Source:HGNC Symbol;Acc:14323] | |
| TRPM6 | Transient receptor potential cation channel, subfamily M, member 6 [Source:HGNC Symbol;Acc:17995] | |
| TRPM8 | Transient receptor potential cation channel, subfamily M, member 8 [Source:HGNC Symbol;Acc:17961] | |
| TRPV2 | Transient receptor potential cation channel, subfamily V, member 2 [Source:HGNC Symbol;Acc:18082] | |
| TRPV6 | Transient receptor potential cation channel, subfamily V, member 6 [Source:HGNC Symbol;Acc:14006] | |
| TRRAP | Transformation/transcription domain-associated protein [Source:HGNC Symbol;Acc:12347] | √ |
| TRUB1 | Trub pseudouridine (psi) synthase homolog 1 (E. Coli) [Source:HGNC Symbol;Acc:16060] | |
| TRUB2 | Trub pseudouridine (psi) synthase homolog 2 (E. Coli) [Source:HGNC Symbol;Acc:17170] | |
| TSC1 | Tuberous sclerosis 1 [Source:HGNC Symbol;Acc:12362] | √ |
| TSC2 | Tuberous sclerosis 2 [Source:HGNC Symbol;Acc:12363] | |
| TSC22D1 | TSC22 domain family, member 1 [Source:HGNC Symbol;Acc:16826] | |
| TSC22D2 | TSC22 domain family, member 2 [Source:HGNC Symbol;Acc:29095] | |
| TSC22D4 | TSC22 domain family, member 4 [Source:HGNC Symbol;Acc:21696] | |
| TSEN2 | Trna splicing endonuclease 2 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:28422] | |
| TSEN34 | Trna splicing endonuclease 34 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:15506] | |
| TSEN54 | Trna splicing endonuclease 54 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:27561] | |

| | | |
|-----------------|---|---|
| TSGA14 | Testis specific, 14 [Source:HGNC Symbol;Acc:12370] | |
| TSHR | Thyroid stimulating hormone receptor [Source:HGNC Symbol;Acc:12373] | √ |
| TSHZ1 | Teashirt zinc finger homeobox 1 [Source:HGNC Symbol;Acc:10669] | |
| TSHZ2 | Teashirt zinc finger homeobox 2 [Source:HGNC Symbol;Acc:13010] | |
| TSHZ3 | Teashirt zinc finger homeobox 3 [Source:HGNC Symbol;Acc:30700] | |
| TSKS | Testis-specific serine kinase substrate [Source:HGNC Symbol;Acc:30719] | |
| TSKU | Tsukushi small leucine rich proteoglycan homolog (Xenopus laevis) [Source:HGNC Symbol;Acc:28850] | |
| TSLP | Thymic stromal lymphopoietin [Source:HGNC Symbol;Acc:30743] | |
| TSNARE1 | T-SNARE domain containing 1 [Source:HGNC Symbol;Acc:26437] | |
| TSNAXIP1 | Translin-associated factor X interacting protein 1 [Source:HGNC Symbol;Acc:18586] | |
| TSPAN1 | Tetraspanin 1 [Source:HGNC Symbol;Acc:20657] | |
| TSPAN11 | Tetraspanin 11 [Source:HGNC Symbol;Acc:30795] | |
| TSPAN14 | Tetraspanin 14 [Source:HGNC Symbol;Acc:23303] | |
| TSPAN17 | Tetraspanin 17 [Source:HGNC Symbol;Acc:13594] | |
| TSPAN18 | Tetraspanin 18 [Source:HGNC Symbol;Acc:20660] | |
| TSPAN3 | Tetraspanin 3 [Source:HGNC Symbol;Acc:17752] | |
| TSPAN33 | Tetraspanin 33 [Source:HGNC Symbol;Acc:28743] | |
| TSPAN8 | Tetraspanin 8 [Source:HGNC Symbol;Acc:11855] | |
| TSPYL2 | TSPY-like 2 [Source:HGNC Symbol;Acc:24358] | |
| TSSK1B | Testis-specific serine kinase 1B [Source:HGNC Symbol;Acc:14968] | |
| TSSK2 | Testis-specific serine kinase 2 [Source:HGNC Symbol;Acc:11401] | |
| TSSK3 | Testis-specific serine kinase 3 [Source:HGNC Symbol;Acc:15473] | |
| TSSK6 | Testis-specific serine kinase 6 [Source:HGNC Symbol;Acc:30410] | |
| TST | Thiosulfate sulfurtransferase (rhodanese) [Source:HGNC Symbol;Acc:12388] | |
| TSTD2 | Thiosulfate sulfurtransferase (rhodanese)-like domain containing 2 [Source:HGNC Symbol;Acc:30087] | |
| TTBK1 | Tau tubulin kinase 1 [Source:HGNC Symbol;Acc:19140] | |
| TTBK2 | Tau tubulin kinase 2 [Source:HGNC Symbol;Acc:19141] | |
| TTC1 | Tetratricopeptide repeat domain 1 [Source:HGNC Symbol;Acc:12391] | |
| TTC12 | Tetratricopeptide repeat domain 12 [Source:HGNC Symbol;Acc:23700] | |

| | | |
|---------------|--|--|
| TTC17 | Tetratricopeptide repeat domain 17 [Source:HGNC Symbol;Acc:25596] | |
| TTC23 | Tetratricopeptide repeat domain 23 [Source:HGNC Symbol;Acc:25730] | |
| TTC24 | Tetratricopeptide repeat domain 24 [Source:HGNC Symbol;Acc:32348] | |
| TTC27 | Tetratricopeptide repeat domain 27 [Source:HGNC Symbol;Acc:25986] | |
| TTC3 | Tetratricopeptide repeat domain 3 [Source:HGNC Symbol;Acc:12393] | |
| TTC31 | Tetratricopeptide repeat domain 31 [Source:HGNC Symbol;Acc:25759] | |
| TTC39A | Tetratricopeptide repeat domain 39A [Source:HGNC Symbol;Acc:18657] | |
| TTC4 | Tetratricopeptide repeat domain 4 [Source:HGNC Symbol;Acc:12394] | |
| TTC7A | Tetratricopeptide repeat domain 7A [Source:HGNC Symbol;Acc:19750] | |
| TTC7B | Tetratricopeptide repeat domain 7B [Source:HGNC Symbol;Acc:19858] | |
| TTC9 | Tetratricopeptide repeat domain 9 [Source:HGNC Symbol;Acc:20267] | |
| TTC9B | Tetratricopeptide repeat domain 9B [Source:HGNC Symbol;Acc:26395] | |
| TTI1 | Tel2 interacting protein 1 homolog (S. Pombe) [Source:HGNC Symbol;Acc:29029] | |
| TTLL1 | Tubulin tyrosine ligase-like family, member 1 [Source:HGNC Symbol;Acc:1312] | |
| TTLL6 | Tubulin tyrosine ligase-like family, member 6 [Source:HGNC Symbol;Acc:26664] | |
| TTLL7 | Tubulin tyrosine ligase-like family, member 7 [Source:HGNC Symbol;Acc:26242] | |
| TTLL9 | Tubulin tyrosine ligase-like family, member 9 [Source:HGNC Symbol;Acc:16118] | |
| TTN | Titin [Source:HGNC Symbol;Acc:12403] | |
| TTPA | Tocopherol (alpha) transfer protein [Source:HGNC Symbol;Acc:12404] | |
| TTPAL | Tocopherol (alpha) transfer protein-like [Source:HGNC Symbol;Acc:16114] | |
| TTYH2 | Tweety homolog 2 (Drosophila) [Source:HGNC Symbol;Acc:13877] | |
| TUB | Tubby homolog (mouse) [Source:HGNC Symbol;Acc:12406] | |
| TUBA1A | Tubulin, alpha 1a [Source:HGNC Symbol;Acc:20766] | |
| TUBA1B | Tubulin, alpha 1b [Source:HGNC Symbol;Acc:18809] | |
| TUBA1C | Tubulin, alpha 1c [Source:HGNC Symbol;Acc:20768] | |
| TUBAL3 | Tubulin, alpha-like 3 [Source:HGNC Symbol;Acc:23534] | |
| TUBB1 | Tubulin, beta 1 [Source:HGNC Symbol;Acc:16257] | |
| TUBB2A | Tubulin, beta 2A [Source:HGNC Symbol;Acc:12412] | |

| | | |
|------------------|--|--|
| TUBB2B | Tubulin, beta 2B [Source:HGNC Symbol;Acc:30829] | |
| TUBB2C | Tubulin, beta 2C [Source:HGNC Symbol;Acc:20771] | |
| TUBB3 | Tubulin, beta 3 [Source:HGNC Symbol;Acc:20772] | |
| TUBB4 | Tubulin, beta 4 [Source:HGNC Symbol;Acc:20774] | |
| TUBB6 | Tubulin, beta 6 [Source:HGNC Symbol;Acc:20776] | |
| TUBD1 | Tubulin, delta 1 [Source:HGNC Symbol;Acc:16811] | |
| TUBE1 | Tubulin, epsilon 1 [Source:HGNC Symbol;Acc:20775] | |
| TUBG2 | Tubulin, gamma 2 [Source:HGNC Symbol;Acc:12419] | |
| TUBGCP3 | Tubulin, gamma complex associated protein 3 [Source:HGNC Symbol;Acc:18598] | |
| TUBGCP6 | Tubulin, gamma complex associated protein 6 [Source:HGNC Symbol;Acc:18127] | |
| TUFM | Tu translation elongation factor, mitochondrial [Source:HGNC Symbol;Acc:12420] | |
| TULP3 | Tubby like protein 3 [Source:HGNC Symbol;Acc:12425] | |
| TUSC2 | Tumor suppressor candidate 2 [Source:HGNC Symbol;Acc:17034] | |
| TUSC3 | Tumor suppressor candidate 3 [Source:HGNC Symbol;Acc:30242] | |
| TWISTNB | TWIST neighbor [Source:HGNC Symbol;Acc:18027] | |
| TXLNA | Taxilin alpha [Source:HGNC Symbol;Acc:30685] | |
| TXLNG | Taxilin gamma [Source:HGNC Symbol;Acc:18578] | |
| TXNDC16 | Thioredoxin domain containing 16 [Source:HGNC Symbol;Acc:19965] | |
| TXNL1 | Thioredoxin-like 1 [Source:HGNC Symbol;Acc:12436] | |
| TXNRD1 | Thioredoxin reductase 1 [Source:HGNC Symbol;Acc:12437] | |
| TXNRD3 | Thioredoxin reductase 3 [Source:HGNC Symbol;Acc:20667] | |
| TXNRD3IT1 | Thioredoxin reductase 3 intronic transcript 1 [Source:HGNC Symbol;Acc:33870] | |
| TYW3 | Trna-yw synthesizing protein 3 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:24757] | |
| U62631.1 | CDNA: FLJ22814 fis, clone KAIA3004 [Source:uniprotkb/trembl;Acc:Q9H5X8] | |
| UACA | Uveal autoantigen with coiled-coil domains and ankyrin repeats [Source:HGNC Symbol;Acc:15947] | |

| | | |
|----------------|---|--|
| UAP1 | UDP-N-acteylglucosamine pyrophosphorylase 1 [Source:HGNC Symbol;Acc:12457] | |
| UBA1 | Ubiquitin-like modifier activating enzyme 1 [Source:HGNC Symbol;Acc:12469] | |
| UBA2 | Ubiquitin-like modifier activating enzyme 2 [Source:HGNC Symbol;Acc:30661] | |
| UBA3 | Ubiquitin-like modifier activating enzyme 3 [Source:HGNC Symbol;Acc:12470] | |
| UBA6 | Ubiquitin-like modifier activating enzyme 6 [Source:HGNC Symbol;Acc:25581] | |
| UBAC1 | UBA domain containing 1 [Source:HGNC Symbol;Acc:30221] | |
| UBAC2 | UBA domain containing 2 [Source:HGNC Symbol;Acc:20486] | |
| UBAP1 | Ubiquitin associated protein 1 [Source:HGNC Symbol;Acc:12461] | |
| UBAP2L | Ubiquitin associated protein 2-like [Source:HGNC Symbol;Acc:29877] | |
| UBASH3A | Ubiquitin associated and SH3 domain containing A [Source:HGNC Symbol;Acc:12462] | |
| UBASH3B | Ubiquitin associated and SH3 domain containing B [Source:HGNC Symbol;Acc:29884] | |
| UBE2CBP | Ubiquitin-conjugating enzyme E2C binding protein [Source:HGNC Symbol;Acc:21381] | |
| UBE2D2 | Ubiquitin-conjugating enzyme E2D 2 (UBC4/5 homolog, yeast) [Source:HGNC Symbol;Acc:12475] | |
| UBE2G1 | Ubiquitin-conjugating enzyme E2G 1 (UBC7 homolog, yeast) [Source:HGNC Symbol;Acc:12482] | |
| UBE2H | Ubiquitin-conjugating enzyme E2H (UBC8 homolog, yeast) [Source:HGNC Symbol;Acc:12484] | |
| UBE2N | Ubiquitin-conjugating enzyme E2N (UBC13 homolog, yeast) [Source:HGNC Symbol;Acc:12492] | |
| UBE2NL | Ubiquitin-conjugating enzyme E2N-like [Source:HGNC Symbol;Acc:31710] | |
| UBE2O | Ubiquitin-conjugating enzyme E2O [Source:HGNC Symbol;Acc:29554] | |
| UBE2QL1 | Ubiquitin-conjugating enzyme E2Q family-like 1 [Source:HGNC Symbol;Acc:37269] | |
| UBE2R2 | Ubiquitin-conjugating enzyme E2R 2 [Source:HGNC Symbol;Acc:19907] | |

| | | |
|---------------|--|---|
| UBE3B | Ubiquitin protein ligase E3B [Source:HGNC Symbol;Acc:13478] | |
| UBE3C | Ubiquitin protein ligase E3C [Source:HGNC Symbol;Acc:16803] | |
| UBFD1 | Ubiquitin family domain containing 1 [Source:HGNC Symbol;Acc:30565] | |
| UBL3 | Ubiquitin-like 3 [Source:HGNC Symbol;Acc:12504] | |
| UBLCP1 | Ubiquitin-like domain containing CTD phosphatase 1 [Source:HGNC Symbol;Acc:28110] | |
| UBN2 | Ubinuclein 2 [Source:HGNC Symbol;Acc:21931] | |
| UBQLN1 | Ubiquilin 1 [Source:HGNC Symbol;Acc:12508] | |
| UBQLN2 | Ubiquilin 2 [Source:HGNC Symbol;Acc:12509] | |
| UBR1 | Ubiquitin protein ligase E3 component n-recognin 1 [Source:HGNC Symbol;Acc:16808] | |
| UBR2 | Ubiquitin protein ligase E3 component n-recognin 2 [Source:HGNC Symbol;Acc:21289] | |
| UBR4 | Ubiquitin protein ligase E3 component n-recognin 4 [Source:HGNC Symbol;Acc:30313] | |
| UBR5 | Ubiquitin protein ligase E3 component n-recognin 5 [Source:HGNC Symbol;Acc:16806] | √ |
| UBTF | Upstream binding transcription factor, RNA polymerase I [Source:HGNC Symbol;Acc:12511] | |
| UBXN10 | UBX domain protein 10 [Source:HGNC Symbol;Acc:26354] | |
| UBXN2B | UBX domain protein 2B [Source:HGNC Symbol;Acc:27035] | |
| UBXN7 | UBX domain protein 7 [Source:HGNC Symbol;Acc:29119] | |
| UCHL5 | Ubiquitin carboxyl-terminal hydrolase L5 [Source:HGNC Symbol;Acc:19678] | |
| UCKL1 | Uridine-cytidine kinase 1-like 1 [Source:HGNC Symbol;Acc:15938] | |
| UFD1L | Ubiquitin fusion degradation 1 like (yeast) [Source:HGNC Symbol;Acc:12520] | |
| UFSP2 | UFM1-specific peptidase 2 [Source:HGNC Symbol;Acc:25640] | |
| UGCG | UDP-glucose ceramide glucosyltransferase [Source:HGNC Symbol;Acc:12524] | |
| UGGT1 | UDP-glucose glycoprotein glucosyltransferase 1 [Source:HGNC Symbol;Acc:15663] | |

| | | |
|-----------------|--|--|
| UGGT2 | UDP-glucose glycoprotein glucosyltransferase 2 [Source:HGNC Symbol;Acc:15664] | |
| UGT1A1 | UDP glucuronosyltransferase 1 family, polypeptide A1 [Source:HGNC Symbol;Acc:12530] | |
| UGT1A10 | UDP glucuronosyltransferase 1 family, polypeptide A10 [Source:HGNC Symbol;Acc:12531] | |
| UGT1A3 | UDP glucuronosyltransferase 1 family, polypeptide A3 [Source:HGNC Symbol;Acc:12535] | |
| UGT1A4 | UDP glucuronosyltransferase 1 family, polypeptide A4 [Source:HGNC Symbol;Acc:12536] | |
| UGT1A5 | UDP glucuronosyltransferase 1 family, polypeptide A5 [Source:HGNC Symbol;Acc:12537] | |
| UGT1A6 | UDP glucuronosyltransferase 1 family, polypeptide A6 [Source:HGNC Symbol;Acc:12538] | |
| UGT1A7 | UDP glucuronosyltransferase 1 family, polypeptide A7 [Source:HGNC Symbol;Acc:12539] | |
| UGT1A8 | UDP glucuronosyltransferase 1 family, polypeptide A8 [Source:HGNC Symbol;Acc:12540] | |
| UGT1A9 | UDP glucuronosyltransferase 1 family, polypeptide A9 [Source:HGNC Symbol;Acc:12541] | |
| UGT2A3 | UDP glucuronosyltransferase 2 family, polypeptide A3 [Source:HGNC Symbol;Acc:28528] | |
| UGT2B4 | UDP glucuronosyltransferase 2 family, polypeptide B4 [Source:HGNC Symbol;Acc:12553] | |
| UGT3A1 | UDP glycosyltransferase 3 family, polypeptide A1 [Source:HGNC Symbol;Acc:26625] | |
| UGT8 | UDP glycosyltransferase 8 [Source:HGNC Symbol;Acc:12555] | |
| UHMK1 | U2AF homology motif (UHM) kinase 1 [Source:HGNC Symbol;Acc:19683] | |
| UHRF1 | Ubiquitin-like with PHD and ring finger domains 1 [Source:HGNC Symbol;Acc:12556] | |
| UHRF1BP1 | UHRF1 binding protein 1 [Source:HGNC Symbol;Acc:21216] | |
| ULBP1 | UL16 binding protein 1 [Source:HGNC Symbol;Acc:14893] | |

| | | |
|---------------|--|--|
| ULBP2 | UL16 binding protein 2 [Source:HGNC Symbol;Acc:14894] | |
| ULK1 | Unc-51-like kinase 1 (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:12558] | |
| ULK3 | Unc-51-like kinase 3 (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:19703] | |
| ULK4 | Unc-51-like kinase 4 (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:15784] | |
| UNC13A | Unc-13 homolog A (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:23150] | |
| UNC45B | Unc-45 homolog B (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:14304] | |
| UNC5A | Unc-5 homolog A (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:12567] | |
| UNC5B | Unc-5 homolog B (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:12568] | |
| UNC5C | Unc-5 homolog C (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:12569] | |
| UNC5CL | Unc-5 homolog C (<i>C. Elegans</i>)-like [Source:HGNC Symbol;Acc:21203] | |
| UNC80 | Unc-80 homolog (<i>C. Elegans</i>) [Source:HGNC Symbol;Acc:26582] | |
| UNG | Uracil-DNA glycosylase [Source:HGNC Symbol;Acc:12572] | |
| UNKL | Unkempt homolog (<i>Drosophila</i>)-like [Source:HGNC Symbol;Acc:14184] | |
| UPB1 | Ureidopropionase, beta [Source:HGNC Symbol;Acc:16297] | |
| UPF3A | UPF3 regulator of nonsense transcripts homolog A (yeast) [Source:HGNC Symbol;Acc:20332] | |
| UQCC | Ubiquinol-cytochrome c reductase complex chaperone [Source:HGNC Symbol;Acc:15891] | |
| UQCR11 | Ubiquinol-cytochrome c reductase, complex III subunit XI [Source:HGNC Symbol;Acc:30862] | |
| UQCRB | Ubiquinol-cytochrome c reductase binding protein [Source:HGNC Symbol;Acc:12582] | |
| UQCRC1 | Ubiquinol-cytochrome c reductase core protein I [Source:HGNC Symbol;Acc:12585] | |
| UQCRC2 | Ubiquinol-cytochrome c reductase core protein II [Source:HGNC Symbol;Acc:12586] | |
| URB1 | URB1 ribosome biogenesis 1 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:17344] | |
| URGCP | Upregulator of cell proliferation [Source:HGNC Symbol;Acc:30890] | |
| UROD | Uroporphyrinogen decarboxylase [Source:HGNC Symbol;Acc:12591] | |
| USH1G | Usher syndrome 1G (autosomal recessive) [Source:HGNC Symbol;Acc:16356] | |

| | | |
|----------------|--|--|
| USH2A | Usher syndrome 2A (autosomal recessive, mild) [Source:HGNC Symbol;Acc:12601] | |
| USHBP1 | Usher syndrome 1C binding protein 1 [Source:HGNC Symbol;Acc:24058] | |
| USO1 | USO1 vesicle docking protein homolog (yeast) [Source:HGNC Symbol;Acc:30904] | |
| USP11 | Ubiquitin specific peptidase 11 [Source:HGNC Symbol;Acc:12609] | |
| USP13 | Ubiquitin specific peptidase 13 (isopeptidase T-3) [Source:HGNC Symbol;Acc:12611] | |
| USP14 | Ubiquitin specific peptidase 14 (trna-guanine transglycosylase) [Source:HGNC Symbol;Acc:12612] | |
| USP16 | Ubiquitin specific peptidase 16 [Source:HGNC Symbol;Acc:12614] | |
| USP17L2 | Ubiquitin specific peptidase 17-like 2 [Source:HGNC Symbol;Acc:34434] | |
| USP19 | Ubiquitin specific peptidase 19 [Source:HGNC Symbol;Acc:12617] | |
| USP2 | Ubiquitin specific peptidase 2 [Source:HGNC Symbol;Acc:12618] | |
| USP20 | Ubiquitin specific peptidase 20 [Source:HGNC Symbol;Acc:12619] | |
| USP22 | Ubiquitin specific peptidase 22 [Source:HGNC Symbol;Acc:12621] | |
| USP24 | Ubiquitin specific peptidase 24 [Source:HGNC Symbol;Acc:12623] | |
| USP25 | Ubiquitin specific peptidase 25 [Source:HGNC Symbol;Acc:12624] | |
| USP26 | Ubiquitin specific peptidase 26 [Source:HGNC Symbol;Acc:13485] | |
| USP28 | Ubiquitin specific peptidase 28 [Source:HGNC Symbol;Acc:12625] | |
| USP3 | Ubiquitin specific peptidase 3 [Source:HGNC Symbol;Acc:12626] | |
| USP30 | Ubiquitin specific peptidase 30 [Source:HGNC Symbol;Acc:20065] | |
| USP31 | Ubiquitin specific peptidase 31 [Source:HGNC Symbol;Acc:20060] | |
| USP32 | Ubiquitin specific peptidase 32 [Source:HGNC Symbol;Acc:19143] | |
| USP33 | Ubiquitin specific peptidase 33 [Source:HGNC Symbol;Acc:20059] | |
| USP34 | Ubiquitin specific peptidase 34 [Source:HGNC Symbol;Acc:20066] | |
| USP35 | Ubiquitin specific peptidase 35 [Source:HGNC Symbol;Acc:20061] | |
| USP36 | Ubiquitin specific peptidase 36 [Source:HGNC Symbol;Acc:20062] | |
| USP37 | Ubiquitin specific peptidase 37 [Source:HGNC Symbol;Acc:20063] | |
| USP38 | Ubiquitin specific peptidase 38 [Source:HGNC Symbol;Acc:20067] | |
| USP40 | Ubiquitin specific peptidase 40 [Source:HGNC Symbol;Acc:20069] | |
| USP42 | Ubiquitin specific peptidase 42 [Source:HGNC Symbol;Acc:20068] | |
| USP43 | Ubiquitin specific peptidase 43 [Source:HGNC Symbol;Acc:20072] | |

| | | |
|---------------|--|--|
| USP44 | Ubiquitin specific peptidase 44 [Source:HGNC Symbol;Acc:20064] | |
| USP45 | Ubiquitin specific peptidase 45 [Source:HGNC Symbol;Acc:20080] | |
| USP46 | Ubiquitin specific peptidase 46 [Source:HGNC Symbol;Acc:20075] | |
| USP47 | Ubiquitin specific peptidase 47 [Source:HGNC Symbol;Acc:20076] | |
| USP48 | Ubiquitin specific peptidase 48 [Source:HGNC Symbol;Acc:18533] | |
| USP54 | Ubiquitin specific peptidase 54 [Source:HGNC Symbol;Acc:23513] | |
| USP7 | Ubiquitin specific peptidase 7 (herpes virus-associated) [Source:HGNC Symbol;Acc:12630] | |
| USP8 | Ubiquitin specific peptidase 8 [Source:HGNC Symbol;Acc:12631] | |
| USP9Y | Ubiquitin specific peptidase 9, Y-linked [Source:HGNC Symbol;Acc:12633] | |
| UTP15 | UTP15, U3 small nucleolar ribonucleoprotein, homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:25758] | |
| UTP20 | UTP20, small subunit (SSU) processome component, homolog (yeast) [Source:HGNC Symbol;Acc:17897] | |
| UTP23 | UTP23, small subunit (SSU) processome component, homolog (yeast) [Source:HGNC Symbol;Acc:28224] | |
| UTP3 | UTP3, small subunit (SSU) processome component, homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:24477] | |
| UTP6 | UTP6, small subunit (SSU) processome component, homolog (yeast) [Source:HGNC Symbol;Acc:18279] | |
| UTRN | Utrophin [Source:HGNC Symbol;Acc:12635] | |
| VAC14 | Vac14 homolog (S. Cerevisiae) [Source:HGNC Symbol;Acc:25507] | |
| VANGL1 | Vang-like 1 (van gogh, Drosophila) [Source:HGNC Symbol;Acc:15512] | |
| VANGL2 | Vang-like 2 (van gogh, Drosophila) [Source:HGNC Symbol;Acc:15511] | |
| VAPB | VAMP (vesicle-associated membrane protein)-associated protein B and C [Source:HGNC Symbol;Acc:12649] | |
| VARS2 | Valyl-trna synthetase 2, mitochondrial (putative) [Source:HGNC Symbol;Acc:21642] | |
| VASH2 | Vasohibin 2 [Source:HGNC Symbol;Acc:25723] | |
| VASN | Vasorin [Source:HGNC Symbol;Acc:18517] | |
| VAT1 | Vesicle amine transport protein 1 homolog (T. Californica) [Source:HGNC Symbol;Acc:16919] | |

| | | |
|---------------|---|---|
| VAV2 | Vav 2 guanine nucleotide exchange factor [Source:HGNC Symbol;Acc:12658] | |
| VCAM1 | Vascular cell adhesion molecule 1 [Source:HGNC Symbol;Acc:12663] | |
| VCAN | Versican [Source:HGNC Symbol;Acc:2464] | |
| VCL | Vinculin [Source:HGNC Symbol;Acc:12665] | |
| VCP | Valosin containing protein [Source:HGNC Symbol;Acc:12666] | |
| VCPIP1 | Valosin containing protein (p97)/p47 complex interacting protein 1 [Source:HGNC Symbol;Acc:30897] | |
| VDAC1 | Voltage-dependent anion channel 1 [Source:HGNC Symbol;Acc:12669] | |
| VEGFA | Vascular endothelial growth factor A [Source:HGNC Symbol;Acc:12680] | |
| VEGFC | Vascular endothelial growth factor C [Source:HGNC Symbol;Acc:12682] | |
| VENTX | VENT homeobox homolog (Xenopus laevis) [Source:HGNC Symbol;Acc:13639] | |
| VEZF1 | Vascular endothelial zinc finger 1 [Source:HGNC Symbol;Acc:12949] | |
| VEZT | Vezatin, adherens junctions transmembrane protein [Source:HGNC Symbol;Acc:18258] | |
| VGLL1 | Vestigial like 1 (Drosophila) [Source:HGNC Symbol;Acc:20985] | |
| VGLL3 | Vestigial like 3 (Drosophila) [Source:HGNC Symbol;Acc:24327] | |
| VGLL4 | Vestigial like 4 (Drosophila) [Source:HGNC Symbol;Acc:28966] | |
| VHL | Von Hippel-Lindau tumor suppressor [Source:HGNC Symbol;Acc:12687] | √ |
| VIL1 | Villin 1 [Source:HGNC Symbol;Acc:12690] | |
| VIPR1 | Vasoactive intestinal peptide receptor 1 [Source:HGNC Symbol;Acc:12694] | |
| VLDLR | Very low density lipoprotein receptor [Source:HGNC Symbol;Acc:12698] | |
| VMAC | Vimentin-type intermediate filament associated coiled-coil protein [Source:HGNC Symbol;Acc:33803] | |
| VN1R6P | Vomeronasal 1 receptor 6 pseudogene [Source:HGNC Symbol;Acc:13712] | |
| VNN1 | Vanin 1 [Source:HGNC Symbol;Acc:12705] | |
| VNN2 | Vanin 2 [Source:HGNC Symbol;Acc:12706] | |
| VNN3 | Vanin 3 [Source:HGNC Symbol;Acc:16431] | |
| VOPP1 | Vesicular, overexpressed in cancer, prosurvival protein 1 [Source:HGNC Symbol;Acc:34518] | |
| VPS13B | Vacuolar protein sorting 13 homolog B (yeast) [Source:HGNC Symbol;Acc:2183] | |

| | | |
|---------------|---|--|
| VPS13C | Vacuolar protein sorting 13 homolog C (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:23594] | |
| VPS13D | Vacuolar protein sorting 13 homolog D (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:23595] | |
| VPS16 | Vacuolar protein sorting 16 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:14584] | |
| VPS18 | Vacuolar protein sorting 18 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:15972] | |
| VPS26B | Vacuolar protein sorting 26 homolog B (<i>S. Pombe</i>) [Source:HGNC Symbol;Acc:28119] | |
| VPS33A | Vacuolar protein sorting 33 homolog A (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:18179] | |
| VPS37C | Vacuolar protein sorting 37 homolog C (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:26097] | |
| VPS39 | Vacuolar protein sorting 39 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:20593] | |
| VPS4A | Vacuolar protein sorting 4 homolog A (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:13488] | |
| VPS52 | Vacuolar protein sorting 52 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:10518] | |
| VPS54 | Vacuolar protein sorting 54 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:18652] | |
| VRK1 | Vaccinia related kinase 1 [Source:HGNC Symbol;Acc:12718] | |
| VRK2 | Vaccinia related kinase 2 [Source:HGNC Symbol;Acc:12719] | |
| VSIG8 | V-set and immunoglobulin domain containing 8 [Source:HGNC Symbol;Acc:32063] | |
| VSTM2A | V-set and transmembrane domain containing 2A [Source:HGNC Symbol;Acc:28499] | |
| VTA1 | Vps20-associated 1 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:20954] | |
| VTCN1 | V-set domain containing T cell activation inhibitor 1 [Source:HGNC Symbol;Acc:28873] | |

| | | |
|----------------|---|--|
| VWA2 | Von Willebrand factor A domain containing 2 [Source:HGNC Symbol;Acc:24709] | |
| VWA3B | Von Willebrand factor A domain containing 3B [Source:HGNC Symbol;Acc:28385] | |
| VWA5A | Von Willebrand factor A domain containing 5A [Source:HGNC Symbol;Acc:6658] | |
| VWA5B1 | Von Willebrand factor A domain containing 5B1 [Source:HGNC Symbol;Acc:26538] | |
| VWCE | Von Willebrand factor C and EGF domains [Source:HGNC Symbol;Acc:26487] | |
| VWF | Von Willebrand factor [Source:HGNC Symbol;Acc:12726] | |
| WAPAL | Wings apart-like homolog (Drosophila) [Source:HGNC Symbol;Acc:23293] | |
| WBSCR16 | Williams-Beuren syndrome chromosome region 16 [Source:HGNC Symbol;Acc:14948] | |
| WBSCR17 | Williams-Beuren syndrome chromosome region 17 [Source:HGNC Symbol;Acc:16347] | |
| WDFY1 | WD repeat and FYVE domain containing 1 [Source:HGNC Symbol;Acc:20451] | |
| WDFY4 | WDFY family member 4 [Source:HGNC Symbol;Acc:29323] | |
| WDPCP | WD repeat containing planar cell polarity effector [Source:HGNC Symbol;Acc:28027] | |
| WDR11 | WD repeat domain 11 [Source:HGNC Symbol;Acc:13831] | |
| WDR12 | WD repeat domain 12 [Source:HGNC Symbol;Acc:14098] | |
| WDR19 | WD repeat domain 19 [Source:HGNC Symbol;Acc:18340] | |
| WDR20 | WD repeat domain 20 [Source:HGNC Symbol;Acc:19667] | |
| WDR27 | WD repeat domain 27 [Source:HGNC Symbol;Acc:21248] | |
| WDR3 | WD repeat domain 3 [Source:HGNC Symbol;Acc:12755] | |
| WDR33 | WD repeat domain 33 [Source:HGNC Symbol;Acc:25651] | |
| WDR34 | WD repeat domain 34 [Source:HGNC Symbol;Acc:28296] | |
| WDR35 | WD repeat domain 35 [Source:HGNC Symbol;Acc:29250] | |
| WDR36 | WD repeat domain 36 [Source:HGNC Symbol;Acc:30696] | |
| WDR37 | WD repeat domain 37 [Source:HGNC Symbol;Acc:31406] | |
| WDR4 | WD repeat domain 4 [Source:HGNC Symbol;Acc:12756] | |

| | | |
|----------------|--|---|
| WDR41 | WD repeat domain 41 [Source:HGNC Symbol;Acc:25601] | |
| WDR44 | WD repeat domain 44 [Source:HGNC Symbol;Acc:30512] | |
| WDR46 | WD repeat domain 46 [Source:HGNC Symbol;Acc:13923] | |
| WDR47 | WD repeat domain 47 [Source:HGNC Symbol;Acc:29141] | |
| WDR54 | WD repeat domain 54 [Source:HGNC Symbol;Acc:25770] | |
| WDR55 | WD repeat domain 55 [Source:HGNC Symbol;Acc:25971] | |
| WDR60 | WD repeat domain 60 [Source:HGNC Symbol;Acc:21862] | |
| WDR65 | WD repeat domain 65 [Source:HGNC Symbol;Acc:26485] | |
| WDR66 | WD repeat domain 66 [Source:HGNC Symbol;Acc:28506] | |
| WDR67 | WD repeat domain 67 [Source:HGNC Symbol;Acc:30888] | |
| WDR7 | WD repeat domain 7 [Source:HGNC Symbol;Acc:13490] | |
| WDR77 | WD repeat domain 77 [Source:HGNC Symbol;Acc:29652] | |
| WDR78 | WD repeat domain 78 [Source:HGNC Symbol;Acc:26252] | |
| WDR8 | WD repeat domain 8 [Source:HGNC Symbol;Acc:12759] | |
| WDR81 | WD repeat domain 81 [Source:HGNC Symbol;Acc:26600] | |
| WDR86 | WD repeat domain 86 [Source:HGNC Symbol;Acc:28020] | |
| WDR88 | WD repeat domain 88 [Source:HGNC Symbol;Acc:26999] | |
| WDR91 | WD repeat domain 91 [Source:HGNC Symbol;Acc:24997] | |
| WDR96 | WD repeat domain 96 [Source:HGNC Symbol;Acc:26684] | |
| WDTC1 | WD and tetratricopeptide repeats 1 [Source:HGNC Symbol;Acc:29175] | |
| WDYHV1 | WDYHV motif containing 1 [Source:HGNC Symbol;Acc:25490] | |
| WEE1 | WEE1 homolog (S. Pombe) [Source:HGNC Symbol;Acc:12761] | |
| WFDC8 | WAP four-disulfide core domain 8 [Source:HGNC Symbol;Acc:16163] | |
| WFIKKN2 | WAP, follistatin/kazal, immunoglobulin, kunitz and netrin domain containing 2 [Source:HGNC Symbol;Acc:30916] | |
| WFS1 | Wolfram syndrome 1 (wolframin) [Source:HGNC Symbol;Acc:12762] | |
| WHSC1 | Wolf-Hirschhorn syndrome candidate 1 | √ |
| WHSC1L1 | Wolf-Hirschhorn syndrome candidate 1-like 1 | √ |
| WIPI2 | WD repeat domain, phosphoinositide interacting 2 [Source:HGNC Symbol;Acc:32225] | |
| WISP3 | WNT1 inducible signaling pathway protein 3 [Source:HGNC Symbol;Acc:12771] | |
| WIZ | Widely interspaced zinc finger motifs [Source:HGNC Symbol;Acc:30917] | |

| | | |
|---------------|--|---|
| WLS | Wntless homolog (Drosophila) [Source:HGNC Symbol;Acc:30238] | |
| WNK1 | WNK lysine deficient protein kinase 1 [Source:HGNC Symbol;Acc:14540] | |
| WNK2 | WNK lysine deficient protein kinase 2 [Source:HGNC Symbol;Acc:14542] | |
| WNK3 | WNK lysine deficient protein kinase 3 [Source:HGNC Symbol;Acc:14543] | |
| WNK4 | WNK lysine deficient protein kinase 4 [Source:HGNC Symbol;Acc:14544] | |
| WNT16 | Wingless-type MMTV integration site family, member 16 [Source:HGNC Symbol;Acc:16267] | |
| WNT2B | Wingless-type MMTV integration site family, member 2B [Source:HGNC Symbol;Acc:12781] | |
| WNT7A | Wingless-type MMTV integration site family, member 7A [Source:HGNC Symbol;Acc:12786] | |
| WNT8A | Wingless-type MMTV integration site family, member 8A [Source:HGNC Symbol;Acc:12788] | |
| WNT9A | Wingless-type MMTV integration site family, member 9A [Source:HGNC Symbol;Acc:12778] | |
| WNT9B | Wingless-type MMTV integration site family, member 9B [Source:HGNC Symbol;Acc:12779] | |
| WRAP53 | WD repeat containing, antisense to TP53 [Source:HGNC Symbol;Acc:25522] | |
| WRN | Werner syndrome, recq helicase-like | √ |
| WRNIP1 | Werner helicase interacting protein 1 [Source:HGNC Symbol;Acc:20876] | |
| WSB1 | WD repeat and SOCS box containing 1 [Source:HGNC Symbol;Acc:19221] | |
| WSCD1 | WSC domain containing 1 [Source:HGNC Symbol;Acc:29060] | |
| WSCD2 | WSC domain containing 2 [Source:HGNC Symbol;Acc:29117] | |
| WTAP | Wilms tumor 1 associated protein [Source:HGNC Symbol;Acc:16846] | |
| WWC1 | WW and C2 domain containing 1 [Source:HGNC Symbol;Acc:29435] | |
| WWC2 | WW and C2 domain containing 2 [Source:HGNC Symbol;Acc:24148] | |
| WWC3 | WWC family member 3 [Source:HGNC Symbol;Acc:29237] | |
| WWOX | WW domain containing oxidoreductase [Source:HGNC Symbol;Acc:12799] | |
| WWP1 | WW domain containing E3 ubiquitin protein ligase 1 [Source:HGNC Symbol;Acc:17004] | |

| | | |
|------------------------|---|---|
| WWP2 | WW domain containing E3 ubiquitin protein ligase 2 [Source:HGNC Symbol;Acc:16804] | |
| WWTR1 | WW domain containing transcription regulator 1 | √ |
| XAGE3 | X antigen family, member 3 [Source:HGNC Symbol;Acc:14618] | |
| XCR1 | Chemokine (C motif) receptor 1 [Source:HGNC Symbol;Acc:1625] | |
| XDH | Xanthine dehydrogenase [Source:HGNC Symbol;Acc:12805] | |
| XG | Xg blood group [Source:HGNC Symbol;Acc:12806] | |
| XIAP | X-linked inhibitor of apoptosis [Source:HGNC Symbol;Acc:592] | |
| XIRP1 | Xin actin-binding repeat containing 1 [Source:HGNC Symbol;Acc:14301] | |
| XIRP2 | Xin actin-binding repeat containing 2 [Source:HGNC Symbol;Acc:14303] | |
| XKR4 | XK, Kell blood group complex subunit-related family, member 4 [Source:HGNC Symbol;Acc:29394] | |
| XPNPEP3 | X-prolyl aminopeptidase (aminopeptidase P) 3, putative [Source:HGNC Symbol;Acc:28052] | |
| XPO4 | Exportin 4 [Source:HGNC Symbol;Acc:17796] | |
| XPO5 | Exportin 5 [Source:HGNC Symbol;Acc:17675] | |
| XPO7 | Exportin 7 [Source:HGNC Symbol;Acc:14108] | |
| XPOT | Exportin, trna (nuclear export receptor for trnas) [Source:HGNC Symbol;Acc:12826] | |
| XPR1 | Xenotropic and polytropic retrovirus receptor 1 [Source:HGNC Symbol;Acc:12827] | |
| XRCC2 | X-ray repair complementing defective repair in Chinese hamster cells 2 [Source:HGNC Symbol;Acc:12829] | |
| XRRA1 | X-ray radiation resistance associated 1 [Source:HGNC Symbol;Acc:18868] | |
| XXbac-B461K10.4 | Protein MICAL-3 isoform 1 [Source:refseq peptide;Acc:NP_056056] | |
| XYLB | Xylulokinase homolog (H. Influenzae) [Source:HGNC Symbol;Acc:12839] | |
| XYLT1 | Xylosyltransferase I [Source:HGNC Symbol;Acc:15516] | |
| YARS | Tyrosyl-trna synthetase [Source:HGNC Symbol;Acc:12840] | |
| YBEY | Ybey metallopeptidase (putative) [Source:HGNC Symbol;Acc:1299] | |
| YEATS2 | YEATS domain containing 2 [Source:HGNC Symbol;Acc:25489] | |
| YEATS4 | YEATS domain containing 4 [Source:HGNC Symbol;Acc:24859] | |
| YIPF6 | Yip1 domain family, member 6 [Source:HGNC Symbol;Acc:28304] | |

| | | |
|---------------|--|--|
| YKT6 | YKT6 v-SNARE homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:16959] | |
| YOD1 | YOD1 OTU deubiquinating enzyme 1 homolog (<i>S. Cerevisiae</i>) [Source:HGNC Symbol;Acc:25035] | |
| YPEL2 | Yippee-like 2 (<i>Drosophila</i>) [Source:HGNC Symbol;Acc:18326] | |
| YTHDC2 | YTH domain containing 2 [Source:HGNC Symbol;Acc:24721] | |
| YWHAG | Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma polypeptide [Source:HGNC Symbol;Acc:12852] | |
| YWHAH | Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, eta polypeptide [Source:HGNC Symbol;Acc:12853] | |
| YWHAZ | Tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide [Source:HGNC Symbol;Acc:12855] | |
| YY2 | YY2 transcription factor [Source:HGNC Symbol;Acc:31684] | |
| ZACN | Zinc activated ligand-gated ion channel [Source:HGNC Symbol;Acc:29504] | |
| ZADH2 | Zinc binding alcohol dehydrogenase domain containing 2 [Source:HGNC Symbol;Acc:28697] | |
| ZAN | Zonadhesin [Source:HGNC Symbol;Acc:12857] | |
| ZBBX | Zinc finger, B-box domain containing [Source:HGNC Symbol;Acc:26245] | |
| ZBED1 | Zinc finger, BED-type containing 1 [Source:HGNC Symbol;Acc:447] | |
| ZBED5 | Zinc finger, BED-type containing 5 [Source:HGNC Symbol;Acc:30803] | |
| ZBP1 | Z-DNA binding protein 1 [Source:HGNC Symbol;Acc:16176] | |
| ZBTB1 | Zinc finger and BTB domain containing 1 [Source:HGNC Symbol;Acc:20259] | |
| ZBTB10 | Zinc finger and BTB domain containing 10 [Source:HGNC Symbol;Acc:30953] | |
| ZBTB11 | Zinc finger and BTB domain containing 11 [Source:HGNC Symbol;Acc:16740] | |
| ZBTB17 | Zinc finger and BTB domain containing 17 [Source:HGNC Symbol;Acc:12936] | |
| ZBTB24 | Zinc finger and BTB domain containing 24 [Source:HGNC Symbol;Acc:21143] | |
| ZBTB26 | Zinc finger and BTB domain containing 26 [Source:HGNC Symbol;Acc:23383] | |

| | | |
|----------------|---|--|
| ZBTB33 | Zinc finger and BTB domain containing 33 [Source:HGNC Symbol;Acc:16682] | |
| ZBTB34 | Zinc finger and BTB domain containing 34 [Source:HGNC Symbol;Acc:31446] | |
| ZBTB38 | Zinc finger and BTB domain containing 38 [Source:HGNC Symbol;Acc:26636] | |
| ZBTB4 | Zinc finger and BTB domain containing 4 [Source:HGNC Symbol;Acc:23847] | |
| ZBTB40 | Zinc finger and BTB domain containing 40 [Source:HGNC Symbol;Acc:29045] | |
| ZBTB41 | Zinc finger and BTB domain containing 41 [Source:HGNC Symbol;Acc:24819] | |
| ZBTB42 | Zinc finger and BTB domain containing 42 [Source:HGNC Symbol;Acc:32550] | |
| ZBTB45 | Zinc finger and BTB domain containing 45 [Source:HGNC Symbol;Acc:23715] | |
| ZBTB46 | Zinc finger and BTB domain containing 46 [Source:HGNC Symbol;Acc:16094] | |
| ZBTB48 | Zinc finger and BTB domain containing 48 [Source:HGNC Symbol;Acc:4930] | |
| ZBTB49 | Zinc finger and BTB domain containing 49 [Source:HGNC Symbol;Acc:19883] | |
| ZBTB7A | Zinc finger and BTB domain containing 7A [Source:HGNC Symbol;Acc:18078] | |
| ZBTB7B | Zinc finger and BTB domain containing 7B [Source:HGNC Symbol;Acc:18668] | |
| ZBTB8B | Zinc finger and BTB domain containing 8B [Source:HGNC Symbol;Acc:37057] | |
| ZBTB9 | Zinc finger and BTB domain containing 9 [Source:HGNC Symbol;Acc:28323] | |
| ZC3H11A | Zinc finger CCCH-type containing 11A [Source:HGNC Symbol;Acc:29093] | |
| ZC3H12A | Zinc finger CCCH-type containing 12A [Source:HGNC Symbol;Acc:26259] | |
| ZC3H12B | Zinc finger CCCH-type containing 12B [Source:HGNC Symbol;Acc:17407] | |

| | | |
|----------------|---|--|
| ZC3H18 | Zinc finger CCCH-type containing 18 [Source:HGNC Symbol;Acc:25091] | |
| ZC3H3 | Zinc finger CCCH-type containing 3 [Source:HGNC Symbol;Acc:28972] | |
| ZC3H4 | Zinc finger CCCH-type containing 4 [Source:HGNC Symbol;Acc:17808] | |
| ZC3H6 | Zinc finger CCCH-type containing 6 [Source:HGNC Symbol;Acc:24762] | |
| ZCCHC11 | Zinc finger, CCHC domain containing 11 [Source:HGNC Symbol;Acc:28981] | |
| ZCCHC13 | Zinc finger, CCHC domain containing 13 [Source:HGNC Symbol;Acc:31749] | |
| ZCCHC14 | Zinc finger, CCHC domain containing 14 [Source:HGNC Symbol;Acc:24134] | |
| ZCCHC17 | Zinc finger, CCHC domain containing 17 [Source:HGNC Symbol;Acc:30246] | |
| ZCCHC2 | Zinc finger, CCHC domain containing 2 [Source:HGNC Symbol;Acc:22916] | |
| ZCCHC24 | Zinc finger, CCHC domain containing 24 [Source:HGNC Symbol;Acc:26911] | |
| ZCCHC4 | Zinc finger, CCHC domain containing 4 [Source:HGNC Symbol;Acc:22917] | |
| ZCCHC6 | Zinc finger, CCHC domain containing 6 [Source:HGNC Symbol;Acc:25817] | |
| ZCCHC7 | Zinc finger, CCHC domain containing 7 [Source:HGNC Symbol;Acc:26209] | |
| ZDBF2 | Zinc finger, DBF-type containing 2 [Source:HGNC Symbol;Acc:29313] | |
| ZDHHC1 | Zinc finger, DHHC-type containing 1 [Source:HGNC Symbol;Acc:17916] | |
| ZDHHC11 | Zinc finger, DHHC-type containing 11 [Source:HGNC Symbol;Acc:19158] | |
| ZDHHC14 | Zinc finger, DHHC-type containing 14 [Source:HGNC Symbol;Acc:20341] | |
| ZDHHC17 | Zinc finger, DHHC-type containing 17 [Source:HGNC Symbol;Acc:18412] | |
| ZDHHC2 | Zinc finger, DHHC-type containing 2 [Source:HGNC Symbol;Acc:18469] | |
| ZDHHC22 | Zinc finger, DHHC-type containing 22 [Source:HGNC Symbol;Acc:20106] | |
| ZDHHC6 | Zinc finger, DHHC-type containing 6 [Source:HGNC Symbol;Acc:19160] | |
| ZDHHC7 | Zinc finger, DHHC-type containing 7 [Source:HGNC Symbol;Acc:18459] | |
| ZDHHC8 | Zinc finger, DHHC-type containing 8 [Source:HGNC Symbol;Acc:18474] | |
| ZDHHC9 | Zinc finger, DHHC-type containing 9 [Source:HGNC Symbol;Acc:18475] | |
| ZER1 | Zer-1 homolog (C. Elegans) [Source:HGNC Symbol;Acc:30960] | |
| ZFAND3 | Zinc finger, AN1-type domain 3 [Source:HGNC Symbol;Acc:18019] | |
| ZFAT | Zinc finger and AT hook domain containing | |
| ZFHX2 | Zinc finger homeobox 2 | |

| | | |
|----------------|--|--|
| ZFHX3 | Zinc finger homeobox 3 | |
| ZFHX4 | Zinc finger homeobox 4 | |
| ZFP106 | Zinc finger protein 106 homolog (mouse) | |
| ZFP2 | Zinc finger protein 2 homolog (mouse) | |
| ZFP28 | Zinc finger protein 28 homolog (mouse) | |
| ZFP3 | Zinc finger protein 3 homolog (mouse) | |
| ZFP30 | Zinc finger protein 30 homolog (mouse) | |
| ZFP36L2 | Zinc finger protein 36, C3H type-like 2 | |
| ZFP37 | Zinc finger protein 37 homolog (mouse) | |
| ZFP41 | Zinc finger protein 41 homolog (mouse) | |
| ZFP42 | Zinc finger protein 42 homolog (mouse) | |
| ZFP57 | Zinc finger protein 57 homolog (mouse) | |
| ZFP62 | Zinc finger protein 62 homolog (mouse) | |
| ZFP64 | Zinc finger protein 64 homolog (mouse) | |
| ZFPM2 | Zinc finger protein, multitype 2 | |
| ZFX | Zinc finger protein, X-linked | |
| ZFY | Zinc finger protein, Y-linked | |
| ZFYVE1 | Zinc finger, FYVE domain containing 1 | |
| ZFYVE20 | Zinc finger, FYVE domain containing 20 | |
| ZFYVE26 | Zinc finger, FYVE domain containing 26 | |
| ZFYVE28 | Zinc finger, FYVE domain containing 28 | |
| ZG16 | Zymogen granule protein 16 homolog (rat) | |
| ZHX3 | Zinc fingers and homeoboxes 3 | |
| ZIC1 | Zic family member 1 (odd-paired homolog, Drosophila) | |
| ZIC2 | Zic family member 2 (odd-paired homolog, Drosophila) | |
| ZIK1 | Zinc finger protein interacting with K protein 1 homolog (mouse) | |
| ZIM3 | Zinc finger, imprinted 3 | |
| ZKSCAN1 | Zinc finger with KRAB and SCAN domains 1 | |
| ZKSCAN5 | Zinc finger with KRAB and SCAN domains 5 | |
| ZMAT5 | Zinc finger, matrin-type 5 | |
| ZMYM1 | Zinc finger, MYM-type 1 | |
| ZMYM3 | Zinc finger, MYM-type 3 | |
| ZMYM4 | Zinc finger, MYM-type 4 | |

| | | |
|----------------|--------------------------------------|--|
| ZMYM5 | Zinc finger, MYM-type 5 | |
| ZMYND12 | Zinc finger, MYND-type containing 12 | |
| ZNF10 | Zinc finger protein 10 | |
| ZNF107 | Zinc finger protein 107 | |
| ZNF133 | Zinc finger protein 133 | |
| ZNF134 | Zinc finger protein 134 | |
| ZNF135 | Zinc finger protein 135 | |
| ZNF138 | Zinc finger protein 138 | |
| ZNF142 | Zinc finger protein 142 | |
| ZNF148 | Zinc finger protein 148 | |
| ZNF154 | Zinc finger protein 154 | |
| ZNF157 | Zinc finger protein 157 | |
| ZNF16 | Zinc finger protein 16 | |
| ZNF160 | Zinc finger protein 160 | |
| ZNF165 | Zinc finger protein 165 | |
| ZNF167 | Zinc finger protein 167 | |
| ZNF18 | Zinc finger protein 18 | |
| ZNF184 | Zinc finger protein 184 | |
| ZNF185 | Zinc finger protein 185 (LIM domain) | |
| ZNF19 | Zinc finger protein 19 | |
| ZNF193 | Zinc finger protein 193 | |
| ZNF197 | Zinc finger protein 197 | |
| ZNF20 | Zinc finger protein 20 | |
| ZNF200 | Zinc finger protein 200 | |
| ZNF207 | Zinc finger protein 207 | |
| ZNF208 | Zinc finger protein 208 | |
| ZNF212 | Zinc finger protein 212 | |
| ZNF22 | Zinc finger protein 22 (KOX 15) | |
| ZNF221 | Zinc finger protein 221 | |
| ZNF222 | Zinc finger protein 222 | |
| ZNF224 | Zinc finger protein 224 | |
| ZNF225 | Zinc finger protein 225 | |
| ZNF226 | Zinc finger protein 226 | |

| | | |
|----------------|---------------------------------|--|
| ZNF229 | Zinc finger protein 229 | |
| ZNF23 | Zinc finger protein 23 (KOX 16) | |
| ZNF239 | Zinc finger protein 239 | |
| ZNF24 | Zinc finger protein 24 | |
| ZNF248 | Zinc finger protein 248 | |
| ZNF250 | Zinc finger protein 250 | |
| ZNF251 | Zinc finger protein 251 | |
| ZNF253 | Zinc finger protein 253 | |
| ZNF256 | Zinc finger protein 256 | |
| ZNF257 | Zinc finger protein 257 | |
| ZNF26 | Zinc finger protein 26 | |
| ZNF260 | Zinc finger protein 260 | |
| ZNF263 | Zinc finger protein 263 | |
| ZNF264 | Zinc finger protein 264 | |
| ZNF266 | Zinc finger protein 266 | |
| ZNF273 | Zinc finger protein 273 | |
| ZNF274 | Zinc finger protein 274 | |
| ZNF275 | Zinc finger protein 275 | |
| ZNF28 | Zinc finger protein 28 | |
| ZNF280C | Zinc finger protein 280C | |
| ZNF280D | Zinc finger protein 280D | |
| ZNF281 | Zinc finger protein 281 | |
| ZNF285 | Zinc finger protein 285 | |
| ZNF287 | Zinc finger protein 287 | |
| ZNF292 | Zinc finger protein 292 | |
| ZNF295 | Zinc finger protein 295 | |
| ZNF30 | Zinc finger protein 30 | |
| ZNF302 | Zinc finger protein 302 | |
| ZNF304 | Zinc finger protein 304 | |
| ZNF311 | Zinc finger protein 311 | |
| ZNF318 | Zinc finger protein 318 | |
| ZNF322A | Zinc finger protein 322A | |
| ZNF323 | Zinc finger protein 323 | |

| | | |
|---------|--------------------------|---|
| ZNF326 | Zinc finger protein 326 | |
| ZNF329 | Zinc finger protein 329 | |
| ZNF331 | Zinc finger protein 331 | √ |
| ZNF335 | Zinc finger protein 335 | |
| ZNF33A | Zinc finger protein 33A | |
| ZNF33B | Zinc finger protein 33B | |
| ZNF341 | Zinc finger protein 341 | |
| ZNF343 | Zinc finger protein 343 | |
| ZNF345 | Zinc finger protein 345 | |
| ZNF347 | Zinc finger protein 347 | |
| ZNF354A | Zinc finger protein 354A | |
| ZNF354C | Zinc finger protein 354C | |
| ZNF365 | Zinc finger protein 365 | |
| ZNF366 | Zinc finger protein 366 | |
| ZNF37A | Zinc finger protein 37A | |
| ZNF382 | Zinc finger protein 382 | |
| ZNF384 | Zinc finger protein 384 | √ |
| ZNF385A | Zinc finger protein 385A | |
| ZNF391 | Zinc finger protein 391 | |
| ZNF394 | Zinc finger protein 394 | |
| ZNF395 | Zinc finger protein 395 | |
| ZNF397 | Zinc finger protein 397 | |
| ZNF398 | Zinc finger protein 398 | |
| ZNF407 | Zinc finger protein 407 | |
| ZNF408 | Zinc finger protein 408 | |
| ZNF410 | Zinc finger protein 410 | |
| ZNF415 | Zinc finger protein 415 | |
| ZNF416 | Zinc finger protein 416 | |
| ZNF417 | Zinc finger protein 417 | |
| ZNF418 | Zinc finger protein 418 | |
| ZNF426 | Zinc finger protein 426 | |
| ZNF430 | Zinc finger protein 430 | |
| ZNF432 | Zinc finger protein 432 | |

| | | |
|----------------|--------------------------|---|
| ZNF434 | Zinc finger protein 434 | |
| ZNF436 | Zinc finger protein 436 | |
| ZNF440 | Zinc finger protein 440 | |
| ZNF441 | Zinc finger protein 441 | |
| ZNF445 | Zinc finger protein 445 | |
| ZNF449 | Zinc finger protein 449 | |
| ZNF451 | Zinc finger protein 451 | |
| ZNF462 | Zinc finger protein 462 | |
| ZNF468 | Zinc finger protein 468 | |
| ZNF469 | Zinc finger protein 469 | |
| ZNF470 | Zinc finger protein 470 | |
| ZNF471 | Zinc finger protein 471 | |
| ZNF473 | Zinc finger protein 473 | |
| ZNF485 | Zinc finger protein 485 | |
| ZNF488 | Zinc finger protein 488 | |
| ZNF491 | Zinc finger protein 491 | |
| ZNF493 | Zinc finger protein 493 | |
| ZNF496 | Zinc finger protein 496 | |
| ZNF497 | Zinc finger protein 497 | |
| ZNF500 | Zinc finger protein 500 | |
| ZNF501 | Zinc finger protein 501 | |
| ZNF502 | Zinc finger protein 502 | |
| ZNF503 | Zinc finger protein 503 | |
| ZNF507 | Zinc finger protein 507 | |
| ZNF510 | Zinc finger protein 510 | |
| ZNF516 | Zinc finger protein 516 | |
| ZNF517 | Zinc finger protein 517 | |
| ZNF518B | Zinc finger protein 518B | |
| ZNF519 | Zinc finger protein 519 | |
| ZNF521 | Zinc finger protein 521 | √ |
| ZNF525 | Zinc finger protein 525 | |
| ZNF526 | Zinc finger protein 526 | |
| ZNF527 | Zinc finger protein 527 | |

| | | |
|----------------|--------------------------|--|
| ZNF529 | Zinc finger protein 529 | |
| ZNF530 | Zinc finger protein 530 | |
| ZNF534 | Zinc finger protein 534 | |
| ZNF541 | Zinc finger protein 541 | |
| ZNF544 | Zinc finger protein 544 | |
| ZNF546 | Zinc finger protein 546 | |
| ZNF549 | Zinc finger protein 549 | |
| ZNF552 | Zinc finger protein 552 | |
| ZNF555 | Zinc finger protein 555 | |
| ZNF558 | Zinc finger protein 558 | |
| ZNF561 | Zinc finger protein 561 | |
| ZNF562 | Zinc finger protein 562 | |
| ZNF564 | Zinc finger protein 564 | |
| ZNF566 | Zinc finger protein 566 | |
| ZNF568 | Zinc finger protein 568 | |
| ZNF571 | Zinc finger protein 571 | |
| ZNF573 | Zinc finger protein 573 | |
| ZNF577 | Zinc finger protein 577 | |
| ZNF581 | Zinc finger protein 581 | |
| ZNF582 | Zinc finger protein 582 | |
| ZNF584 | Zinc finger protein 584 | |
| ZNF585B | Zinc finger protein 585B | |
| ZNF586 | Zinc finger protein 586 | |
| ZNF587 | Zinc finger protein 587 | |
| ZNF589 | Zinc finger protein 589 | |
| ZNF592 | Zinc finger protein 592 | |
| ZNF599 | Zinc finger protein 599 | |
| ZNF600 | Zinc finger protein 600 | |
| ZNF605 | Zinc finger protein 605 | |
| ZNF608 | Zinc finger protein 608 | |
| ZNF609 | Zinc finger protein 609 | |
| ZNF610 | Zinc finger protein 610 | |
| ZNF611 | Zinc finger protein 611 | |

| | | |
|---------------|-------------------------|--|
| ZNF613 | Zinc finger protein 613 | |
| ZNF614 | Zinc finger protein 614 | |
| ZNF615 | Zinc finger protein 615 | |
| ZNF618 | Zinc finger protein 618 | |
| ZNF619 | Zinc finger protein 619 | |
| ZNF620 | Zinc finger protein 620 | |
| ZNF621 | Zinc finger protein 621 | |
| ZNF622 | Zinc finger protein 622 | |
| ZNF623 | Zinc finger protein 623 | |
| ZNF626 | Zinc finger protein 626 | |
| ZNF628 | Zinc finger protein 628 | |
| ZNF630 | Zinc finger protein 630 | |
| ZNF638 | Zinc finger protein 638 | |
| ZNF642 | Zinc finger protein 642 | |
| ZNF643 | Zinc finger protein 643 | |
| ZNF645 | Zinc finger protein 645 | |
| ZNF648 | Zinc finger protein 648 | |
| ZNF649 | Zinc finger protein 649 | |
| ZNF652 | Zinc finger protein 652 | |
| ZNF653 | Zinc finger protein 653 | |
| ZNF658 | Zinc finger protein 658 | |
| ZNF664 | Zinc finger protein 664 | |
| ZNF665 | Zinc finger protein 665 | |
| ZNF667 | Zinc finger protein 667 | |
| ZNF671 | Zinc finger protein 671 | |
| ZNF672 | Zinc finger protein 672 | |
| ZNF677 | Zinc finger protein 677 | |
| ZNF678 | Zinc finger protein 678 | |
| ZNF684 | Zinc finger protein 684 | |
| ZNF697 | Zinc finger protein 697 | |
| ZNF7 | Zinc finger protein 7 | |
| ZNF701 | Zinc finger protein 701 | |
| ZNF701 | Zinc finger protein 701 | |

| | | |
|----------------|-------------------------------|--|
| ZNF704 | Zinc finger protein 704 | |
| ZNF705B | Zinc finger protein 705B | |
| ZNF705D | Zinc finger protein 705D | |
| ZNF706 | Zinc finger protein 706 | |
| ZNF71 | Zinc finger protein 71 | |
| ZNF711 | Zinc finger protein 711 | |
| ZNF713 | Zinc finger protein 713 | |
| ZNF714 | Zinc finger protein 714 | |
| ZNF717 | Zinc finger protein 717 | |
| ZNF720 | Zinc finger protein 720 | |
| ZNF730 | Zinc finger protein 730 | |
| ZNF74 | Zinc finger protein 74 | |
| ZNF746 | Zinc finger protein 746 | |
| ZNF749 | Zinc finger protein 749 | |
| ZNF750 | Zinc finger protein 750 | |
| ZNF75D | Zinc finger protein 75D | |
| ZNF765 | Zinc finger protein 765 | |
| ZNF771 | Zinc finger protein 771 | |
| ZNF772 | Zinc finger protein 772 | |
| ZNF773 | Zinc finger protein 773 | |
| ZNF776 | Zinc finger protein 776 | |
| ZNF780A | Zinc finger protein 780A | |
| ZNF780B | Zinc finger protein 780B | |
| ZNF782 | Zinc finger protein 782 | |
| ZNF783 | Zinc finger family member 783 | |
| ZNF789 | Zinc finger protein 789 | |
| ZNF792 | Zinc finger protein 792 | |
| ZNF8 | Zinc finger protein 8 | |
| ZNF804A | Zinc finger protein 804A | |
| ZNF805 | Zinc finger protein 805 | |
| ZNF808 | Zinc finger protein 808 | |
| ZNF81 | Zinc finger protein 81 | |
| ZNF813 | Zinc finger protein 813 | |

| | | |
|----------------|---|--|
| ZNF814 | Zinc finger protein 814 | |
| ZNF816 | Zinc finger protein 816 | |
| ZNF823 | Zinc finger protein 823 | |
| ZNF827 | Zinc finger protein 827 | |
| ZNF829 | Zinc finger protein 829 | |
| ZNF830 | Zinc finger protein 830 | |
| ZNF831 | Zinc finger protein 831 | |
| ZNF836 | Zinc finger protein 836 | |
| ZNF837 | Zinc finger protein 837 | |
| ZNF839 | Zinc finger protein 839 | |
| ZNF84 | Zinc finger protein 84 | |
| ZNF845 | Zinc finger protein 845 | |
| ZNF860 | Zinc finger protein 860 | |
| ZNF862 | Zinc finger protein 862 | |
| ZNF879 | Zinc finger protein 879 | |
| ZNF880 | Zinc finger protein 880 | |
| ZNF92 | Zinc finger protein 92 | |
| ZNFX1 | Zinc finger, NFX1-type containing 1 | |
| ZNRF1 | Zinc and ring finger 1 | |
| ZP2 | Zona pellucida glycoprotein 2 (sperm receptor) | |
| ZPLD1 | Zona pellucida-like domain containing 1 | |
| ZRANB3 | Zinc finger, RAN-binding domain containing 3 | |
| ZSCAN1 | Zinc finger and SCAN domain containing 1 | |
| ZSCAN12 | Zinc finger and SCAN domain containing 12 | |
| ZSCAN18 | Zinc finger and SCAN domain containing 18 | |
| ZSCAN23 | Zinc finger and SCAN domain containing 23 | |
| ZSCAN5A | Zinc finger and SCAN domain containing 5A | |
| ZSWIM1 | Zinc finger, SWIM-type containing 1 | |
| ZSWIM2 | Zinc finger, SWIM-type containing 2 | |
| ZSWIM5 | Zinc finger, SWIM-type containing 5 | |
| ZSWIM7 | Zinc finger, SWIM-type containing 7 | |
| ZUFSP | Zinc finger with UFM1-specific peptidase domain | |
| ZWINT | ZW10 interactor | |

| | | |
|---------------|--|--|
| ZXDA | Zinc finger, X-linked, duplicated A | |
| ZXDB | Zinc finger, X-linked, duplicated B | |
| ZYG11B | Zyg-11 homolog B (C. Elegans) | |
| ZZEF1 | Zinc finger, ZZ-type with EF-hand domain 1 | |
| ZZZ3 | Zinc finger, ZZ-type containing 3 | |

Supplementary Table 7. Predicted targets of hsa-miR-181a-5p by RNA22 v2 that are cancer genes.

| Gene symbol | Gene name |
|--------------------|---|
| AKAP9 | A kinase (PRKA) anchor protein (yotiao) 9 |
| ARHGEF12 | Rho guanine nucleotide exchange factor (GEF) 12 |
| ARID2 | AT rich interactive domain 2 (ARID, RFX-like) |
| ARNT | Aryl hydrocarbon receptor nuclear translocator |
| ASXL1 | Additional sex combs like 1 (Drosophila) |
| ATM | Ataxia telangiectasia mutated |
| ATP1A1 | ATPase, Na ⁺ /K ⁺ transporting, alpha 1 polypeptide |
| ATRX | α Thalassemia/mental retardation syndrome X-linked |
| AXIN1 | Axin 1 |
| BAP1 | BRCA1 associated protein-1 (ubiquitin carboxy-terminal hydrolase) |
| BCL11A | B-cell CLL/lymphoma 11A (zinc finger protein) |
| BCL11B | B-cell CLL/lymphoma 11B (zinc finger protein) |
| BCL3 | B-cell CLL/lymphoma 3 |
| BCL6 | B-cell CLL/lymphoma 6 |
| BCOR | BCL6 corepressor |
| BCR | Breakpoint cluster region |
| BLM | Bloom syndrome, recq helicase-like |
| BMPR1A | Bone morphogenetic protein receptor, type IA |
| BRAF | V-raf murine sarcoma viral oncogene homolog B1 |
| BRCA1 | Breast cancer 1, early onset |
| BRD4 | Bromodomain containing 4 |
| BTG1 | B-cell translocation gene 1, anti-proliferative |
| BUB1B | Budding uninhibited by benzimidazoles 1 homolog β (yeast) |
| C15orf55 | Chromosome 15 open reading frame 55 |
| C2orf44 | Chromosome 2 open reading frame 44 |
| CAMTA1 | Calmodulin binding transcription activator 1 |
| CARD11 | Caspase recruitment domain family, member 11 |
| CARS | Cysteinyl-trna synthetase |
| CBLB | Cas-Br-M (murine) ecotropic retroviral transforming sequence b |

| | |
|----------------|--|
| CCND1 | Cyclin D1 |
| CD74 | CD74 molecule, major histocompatibility complex, class II invariant chain |
| CDH1 | Cadherin 1, type 1, E-cadherin (epithelial) |
| CDK4 | Cyclin-dependent kinase 4 |
| CHCHD7 | Coiled-coil-helix-coiled-coil-helix domain containing 7 |
| CHEK2 | CHK2 checkpoint homolog (<i>S. Pombe</i>) |
| CHN1 | Chimerin (chimaerin) 1 |
| CIITA | Class II, major histocompatibility complex, transactivator |
| CLTC | Clathrin, heavy chain (Hc) |
| COL1A1 | Collagen, type I, α 1 |
| CREB1 | Camp responsive element binding protein 1 |
| CREB3L2 | Camp responsive element binding protein 3-like 2 |
| CRTC3 | CREB regulated transcription coactivator 3 |
| CTNNB1 | Catenin (cadherin-associated protein), β 1, 88 kDa |
| CYLD | Cylindromatosis (turban tumor syndrome) |
| DDX5 | DEAD (Asp-Glu-Ala-Asp) box polypeptide 5 |
| DICER1 | Dicer 1, ribonuclease type III |
| DNM2 | Dynamamin 2 |
| DNMT3A | DNA (cytosine-5-)-methyltransferase 3 α |
| ECT2L | Epithelial cell transforming sequence 2 oncogene-like |
| EGFR | Epidermal growth factor receptor |
| ELF4 | E74-like factor 4 (ets domain transcription factor) |
| ELL | Elongation factor RNA polymerase II |
| ERBB2 | V-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian) |
| ERCC2 | Excision repair cross-complementing rodent repair deficiency, complementation group 2 |
| ETV5 | Ets variant 5 |
| EXT1 | Exostosin 1 |
| EZH2 | Enhancer of zeste homolog 2 (<i>Drosophila</i>) |
| FANCA | Fanconi anemia, complementation group A |
| FANCD2 | Fanconi anemia, complementation group D2 |
| FBXO11 | F-box protein 11 |
| FBXW7 | F-box and WD repeat domain containing 7 |

| | |
|-----------------|--|
| FGFR1 | Fibroblast growth factor receptor 1 |
| FGFR1OP | FGFR1 oncogene partner |
| FGFR2 | Fibroblast growth factor receptor 2 |
| FHIT | Fragile histidine triad gene |
| FNBP1 | Formin binding protein 1 |
| FOXP1 | Forkhead box P1 |
| GAS7 | Growth arrest-specific 7 |
| GATA2 | GATA binding protein 2 |
| GATA3 | GATA binding protein 3 |
| GNAQ | Guanine nucleotide binding protein (G protein), q polypeptide |
| GNAS | GNAS complex locus |
| GOLGA5 | Golgin A5 |
| GPHN | Gephyrin |
| HERPUD1 | Homocysteine-inducible, endoplasmic reticulum stress-inducible, ubiquitin-like domain member 1 |
| HIP1 | Huntingtin interacting protein 1 |
| HMGA1 | High mobility group AT-hook 1 |
| HMGA2 | High mobility group AT-hook 2 |
| HRAS | V-Ha-ras Harvey rat sarcoma viral oncogene homolog |
| IDH1 | Isocitrate dehydrogenase 1 (NADP ⁺), soluble |
| IDH2 | Isocitrate dehydrogenase 2 (NADP ⁺), mitochondrial |
| IL6ST | Interleukin 6 signal transducer (gp130, oncostatin M receptor) |
| IL7R | Interleukin 7 receptor |
| ITK | IL2-inducible T-cell kinase |
| JAK3 | Janus kinase 3 |
| JAZF1 | JAZF zinc finger 1 |
| JUN | Jun proto-oncogene |
| KCNJ5 | Potassium inwardly-rectifying channel, subfamily J, member 5 |
| KDM5A | Lysine (K)-specific demethylase 5A |
| KIAA1549 | KIAA1549 |
| KIT | V-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog |
| KRAS | V-Ki-ras2 Kirsten rat sarcoma viral oncogene homolog |

| | |
|---------------|---|
| LASP1 | LIM and SH3 protein 1 |
| LCP1 | Lymphocyte cytosolic protein 1 (L-plastin) |
| LIFR | Leukemia inhibitory factor receptor α |
| LPP | LIM domain containing preferred translocation partner in lipoma |
| MAF | V-maf musculoaponeurotic fibrosarcoma oncogene homolog (avian) |
| MALT1 | Mucosa associated lymphoid tissue lymphoma translocation gene 1 |
| MAML2 | Mastermind-like 2 (Drosophila) |
| MAP2K1 | Mitogen-activated protein kinase kinase 1 |
| MAX | MYC associated factor X |
| MDM2 | Mdm2 p53 binding protein homolog (mouse) |
| MDM4 | Mdm4 p53 binding protein homolog (mouse) |
| MED12 | Mediator complex subunit 12 |
| MITF | Microphthalmia-associated transcription factor |
| MKL1 | Megakaryoblastic leukemia (translocation) 1 |
| MLF1 | Myeloid leukemia factor 1 |
| MLH1 | Mutl homolog 1, colon cancer, nonpolyposis type 2 (<i>E. Coli</i>) |
| MLL | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila) |
| MLL3 | Myeloid/lymphoid or mixed-lineage leukemia 3 |
| MLLT10 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 10 |
| MLLT3 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 3 |
| MLLT4 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 4 |
| MLLT6 | Myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 6 |
| MN1 | Meningioma (disrupted in balanced translocation) 1 |
| MSH6 | Muts homolog 6 (<i>E. Coli</i>) |
| MSI2 | Musashi homolog 2 (Drosophila) |
| MSN | Moesin |
| MYD88 | Myeloid differentiation primary response gene (88) |
| MYH11 | Myosin, heavy chain 11, smooth muscle |
| MYST4 | MYST histone acetyltransferase (monocytic leukemia) 4 |

| | |
|-----------------|---|
| NACA | Nascent polypeptide-associated complex α subunit |
| NCOA1 | Nuclear receptor coactivator 1 |
| NDRG1 | N-myc downstream regulated 1 |
| NF1 | Neurofibromin 1 |
| NF2 | Neurofibromin 2 (merlin) |
| NIN | Ninein (GSK3B interacting protein) |
| NONO | Non-POU domain containing, octamer-binding |
| NOTCH1 | Notch 1 |
| NOTCH2 | Notch 2 |
| NT5C2 | 5'-nucleotidase, cytosolic II |
| NTRK3 | Neurotrophic tyrosine kinase, receptor, type 3 |
| NUP214 | Nucleoporin 214 kDa |
| NUP98 | Nucleoporin 98 kDa |
| OLIG2 | Oligodendrocyte lineage transcription factor 2 |
| P2RY8 | Purinergic receptor P2Y, G-protein coupled, 8 |
| PAFAH1B2 | Platelet-activating factor acetylhydrolase 1b, catalytic subunit 2 (30 kDa) |
| PALB2 | Partner and localizer of BRCA2 |
| PAX5 | Paired box 5 |
| PAX7 | Paired box 7 |
| PBRM1 | Polybromo 1 |
| PBX1 | Pre-B-cell leukemia homeobox 1 |
| PDE4DIP | Phosphodiesterase 4D interacting protein |
| PDGFRA | Platelet-derived growth factor receptor, α polypeptide |
| PDGFRB | Platelet-derived growth factor receptor, β polypeptide |
| PER1 | Period homolog 1 (Drosophila) |
| PHF6 | PHD finger protein 6 |
| PHOX2B | Paired-like homeobox 2b |
| PIK3CA | Phosphoinositide-3-kinase, catalytic, α polypeptide |
| PIK3R1 | Phosphoinositide-3-kinase, regulatory subunit 1 α |
| PLAG1 | Pleiomorphic adenoma gene 1 |
| PML | Promyelocytic leukemia |
| POU2AF1 | POU class 2 associating factor 1 |
| PPARG | Peroxisome proliferator-activated receptor γ |

| | |
|----------------|---|
| PRDM16 | PR domain containing 16 |
| PTEN | Phosphatase and tensin homolog |
| PTPN11 | Protein tyrosine phosphatase, non-receptor type 11 |
| PTPRC | Protein tyrosine phosphatase, receptor type, C |
| RAD21 | RAD21 homolog (<i>S. Pombe</i>) |
| RAF1 | V-raf-1 murine leukemia viral oncogene homolog 1 |
| RALGDS | Ral guanine nucleotide dissociation stimulator |
| RANBP17 | RAN binding protein 17 |
| RET | Ret proto-oncogene |
| ROS1 | C-ros oncogene 1 , receptor tyrosine kinase |
| RPN1 | Ribophorin I |
| SBDS | Shwachman-Bodian-Diamond syndrome |
| SDC4 | Syndecan 4 |
| SDHD | Succinate dehydrogenase complex, subunit D, integral membrane protein |
| SETBP1 | SET binding protein 1 |
| SETD2 | SET domain containing 2 |
| SFPQ | Splicing factor proline/glutamine-rich |
| SLC45A3 | Solute carrier family 45, member 3 |
| SMO | Smoothed homolog (<i>Drosophila</i>) |
| SOX2 | SRY (sex determining region Y)-box 2 |
| SRGAP3 | SLIT-ROBO Rho gtpase activating protein 3 |
| SS18 | Synovial sarcoma translocation, chromosome 18 |
| SS18L1 | Synovial sarcoma translocation gene on chromosome 18-like 1 |
| SSX1 | Synovial sarcoma, X breakpoint 1 |
| SSX2 | Synovial sarcoma, X breakpoint 2 |
| SSX4 | Synovial sarcoma, X breakpoint 4 |
| STAG2 | Stromal antigen 2 |
| STAT3 | Signal transducer and activator of transcription 3 (acute-phase response factor) |
| SUZ12 | Suppressor of zeste 12 homolog (<i>Drosophila</i>) |
| TAF15 | TAF15 RNA polymerase II, TATA box binding protein (TBP)-associated factor, 68 kDa |
| TAL1 | T-cell acute lymphocytic leukemia 1 |
| TBL1XR1 | Transducin β -like 1 X-linked receptor 1 |

| | |
|-----------------|--|
| TCL1A | T-cell leukemia/lymphoma 1A |
| TERT | Telomerase reverse transcriptase |
| TET2 | Tet oncogene family member 2 |
| TFRC | Transferrin receptor (p90, CD71) |
| THRAP3 | Thyroid hormone receptor associated protein 3 |
| TMPRSS2 | Transmembrane protease, serine 2 |
| TNFAIP3 | Tumor necrosis factor, alpha-induced protein 3 |
| TNFRSF14 | Tumor necrosis factor receptor superfamily, member 14 (herpesvirus entry mediator) |
| TOP1 | Topoisomerase (DNA) I |
| TRAF7 | TNF receptor-associated factor 7 |
| TRIM33 | Tripartite motif containing 33 |
| TRIP11 | Thyroid hormone receptor interactor 11 |
| TRRAP | Transformation/transcription domain-associated protein |
| TSC1 | Tuberous sclerosis 1 |
| TSC2 | Tuberous sclerosis 2 |
| TSHR | Thyroid stimulating hormone receptor |
| UBR5 | Ubiquitin protein ligase E3 component n-recognin 5 |
| VHL | Von Hippel-Lindau tumor suppressor |
| WHSC1 | Wolf-Hirschhorn syndrome candidate 1 |
| WHSC1L1 | Wolf-Hirschhorn syndrome candidate 1-like 1 |
| WRN | Werner syndrome, recq helicase-like |
| WWTR1 | WW domain containing transcription regulator 1 |
| ZNF331 | Zinc finger protein 331 |
| ZNF384 | Zinc finger protein 384 |
| ZNF521 | Zinc finger protein 521 |

Supplementary Table 8. Predicted targets of hsa-miR-181a-5p by TargetMiner

| Gene symbol | mRNA ID | Chromosomal location | Aliases | Gene name | Cancer gene |
|--------------------|----------------|-----------------------------|--------------------------------|--|--------------------|
| ACAP2 | NM_012287 | 3q29 | CENTB2; CNT-B2 | ArfGAP with coiled-coil, ankyrin repeat and PH domains 2 | |
| ACVR1C | NM_145259 | 2q24.1 | ALK7; ACVRLK7 | Activin A receptor, type IC | |
| ACVR2B | NM_001106 | 3p22 | HTX4; ACTRIIB; ActR-IIB | Activin A receptor, type IIB | |
| ADCY1 | NM_021116 | 7p13-p12 | AC1; DFNB44 | Adenylate cyclase 1 (brain) | |
| AFF1 | NM_005935 | 4q21 | AF4; PBM1; MLLT2 | AF4/FMR2 family, member 1 | |
| AFF2 | NM_002025 | Xq28 | FMR2; MRX2; OX19; FMR2P; FRAXE | AF4/FMR2 family, member 2 | |
| AHCTF1 | NM_015446 | 1q44 | ELYS; MST108; TMBS62; MSTP108 | AT hook containing transcription factor 1 | |
| AP1G1 | NM_001030007 | 16q23 | ADTG; CLAPG1 | Adaptor-related protein complex 1, g1 subunit | |
| ARFGEF2 | NM_006420 | 20q13.13 | BIG2; PVNH2; dJ1164I10.1 | ADP-ribosylation factor guanine nucleotide-exchange factor 2 (brefeldin A-inhibited) | |
| ARHGAP26 | NM_015071 | 5q31 | GRAF; GRAF1; OPHN1L; OPHN1L1 | Rho GTPase activating protein 26 | |
| ARHGAP29 | NM_004815 | 1p22.1 | PARG1 | Rho GTPase activating protein 29 | |
| C2orf69 | NM_153689 | 2q33.1 | | Chromosome 2 open reading frame 69 | |
| C6orf89 | NM_152734 | 6p21.2 | BRAP | Chromosome 6 open reading frame 89 | |
| CALCR | NM_001742 | 7q21.3 | CRT; CTR; CT-R; CTR1 | Calcitonin receptor | |
| CHIC1 | NM_001039840 | Xq13.2 | BRX | Cysteine-rich hydrophobic domain 1 | |
| CREB5 | NM_001011666 | 7p15.1 | CRE-BPA | cAMP responsive element binding protein 5 | |
| CREBRF | NM_153607 | 5q35.1 | LRF; C5orf41 | CREB3 regulatory factor | |
| CREBZF | NM_001039618 | 11q14 | ZF; SMILE | CREB/ATF bZIP transcription factor | |

| | | | | | |
|--------|--------------|---------------|---|--|---|
| CYLD | NM_001042355 | 16q12.1 | EAC; MFT; SBS; TEM; BRSS; CDMT; MFT1; CYLD1; CYLDI; USPL2 | Cylindromatosis (turban tumour syndrome) | √ |
| DCLK1 | NM_004734 | 13q13 | CL1; DCLK; CLICK1; DCDC3A; DCAMKL1 | Doublecortin-like kinase 1 | |
| DCP2 | NM_152624 | 5q22.2 | NUDT20 | Decapping mRNA 2 | |
| DIO2 | NM_000793 | 14q24.2-q24.3 | D2; 5DII; SelY; DIOII; TXDI2 | Deiodinase, iodothyronine, type II | |
| DLGAP2 | NM_004745 | 8p23.3 | DAP2; SAPAP2 | Discs, large (Drosophila) homolog-associated protein 2 | |
| DNAJC6 | NM_014787 | 1p31.3 | DJC6; PARK19 | DnaJ (Hsp40) homolog, subfamily C, member 6 | |
| DNAL1 | NM_031427 | 14q24.3 | CILD16; C14orf168 | Dynein, axonemal, light chain 1 | |
| DSC3 | NM_024423 | 18q12.1 | DSC; DSC1; DSC2; DSC4; CDHF3; HT-CP | Desmocollin 3 | |
| EPT1 | NM_033505 | 2p23.3 | SELI; SEPI | Ethanolaminephosphotransferase 1 (CDP-ethanolamine-specific) | |
| ETNK1 | NM_018638 | 12p12.1 | EKI; EKII; EK1 1; Nbla10396 | Ethanolamine kinase 1 | |
| FNDC3A | NM_014923 | 13q14.2 | HUGO; FNDC3; bA203I16.1; bA203I16.5 | Fibronectin type III domain containing 3A | |
| FOXK1 | NM_001037165 | 7p22.1 | FOXK1L | Forkhead box K1 | |
| GABRA4 | NM_000809 | 4p12 | - | g-Aminobutyric acid (GABA) A receptor, a4 | |
| GK5 | NM_001039547 | 3q23 | | Glycerol kinase 5 (putative) | |
| GPD1L | NM_015141 | 3p22.3 | GPD1-L | Glycerol-3-phosphate dehydrogenase 1-like | |
| GPD2 | NM_000408 | 2q24.1 | GDH2; GPDM; mGPDH | Glycerol-3-phosphate dehydrogenase 2 (mitochondrial) | |
| IKZF2 | NM_016260 | 2q34 | ANF1A2; HELIOS; ZNF1A2; ZNFN1A2 | IKAROS family zinc finger 2 (Helios) | |
| ITGA2 | NM_002203 | 5q11.2 | BR; GPIa; CD49B; HPA-5; VLA-2; VLAA2 | Integrin, a2 (CD49B, alpha 2 subunit of VLA-2 receptor) | |

| | | | | | |
|-----------|--------------|----------|---|--|---|
| KCMF1 | NM_020122 | 2 | FIGC; PCMF; ZZZ1; DEBT91 | Potassium channel modulatory factor 1 | |
| KCNMA1 | NM_001014797 | 10q22.3 | SLO; BKTM; SLO1; MaxiK; SAKCA; mSLO1; KCa1.1; SLO-ALPHA; bA205K10.1 | Potassium large conductance calcium-activated channel, subfamily M, a member 1 | |
| KDM5A | NM_001042603 | 12p11 | RBP2; RBBP2; RBBP-2 | Lysine (K)-specific demethylase 5A | √ |
| KIF3B | NM_004798 | 20q11.21 | FLA8; HH0048; KLP-11 | Kinesin family member 3B | |
| KITLG | NM_000899 | 12q22 | SF; MGF; SCF; FPH2; KL-1; Kitl; SHEP7 | KIT ligand | |
| KLF12 | NM_007249 | 13q22 | AP2REP; AP-2rep; HSPC122 | Kruppel-like factor 12 | |
| KLHL28 | NM_017658 | 14q21.2 | BTBD5 | Kelch-like family member 28 | |
| KPNA1 | NM_002264 | 3q21 | RCH2; SRP1; IPOA5; NPI-1 | Karyopherin alpha 1 (importin alpha 5) | |
| KRAS | NM_033360 | 12p12.1 | NS; NS3; CFC2; KRAS1; KRAS2; RASK2; KI-RAS; C-K-RAS; K-RAS2A; K-RAS2B; K-RAS4A; K-RAS4B | Kirsten rat sarcoma viral oncogene homolog | √ |
| KRBOX4 | NM_017776 | Xp11.3 | ZNF673 | KRAB box domain containing 4 | |
| LARP4 | NM_052879 | 12q13.12 | PP13296 | La ribonucleoprotein domain family, member 4 | |
| LDLRAD4 | NM_001003674 | 18p11.21 | C18orf1 | Low density lipoprotein receptor class A domain containing 4 | |
| LIFR | NM_002310 | 5p13-p12 | SWS; SJS2; STWS; CD118; LIF-R | Leukemia inhibitory factor receptor-a | √ |
| MAL2 | NM_052886 | 8q23 | | Mal, T-cell differentiation protein 2 (gene/pseudogene) | |
| MAPK1IP1L | NM_144578 | 14q22.3 | MISS; C14orf32; c14_5346 | Mitogen-activated protein kinase 1 interacting protein 1-like | |
| MARK1 | NM_018650 | 1 | MARK; Par1c; Par-1c | MAP/microtubule affinity-regulating kinase 1 | |
| MFAP3L | NM_001009554 | 4q32.3 | NYD-sp9 | Microfibrillar-associated protein 3-like | |

| | | | | |
|---------|--------------|-----------|---|--|
| MICU3 | NM_181723 | 8p22 | EFHA2 | Mitochondrial calcium uptake family, member 3 |
| MKLN1 | NM_013255 | 7q32 | TWA2 | Muskelin 1, intracellular mediator containing kelch motifs |
| MTX3 | NM_001010891 | 5q14.1 | | Metaxin 3 |
| NCOA7 | NM_181782 | 6q22.32 | ESNA1; TLDC4; ERAP140; NCOA7-AS; Nbla00052; Nbla10993; dJ187J11.3 | Nuclear receptor coactivator 7 |
| NFYB | NM_006166 | 12q22-q23 | HAP3; CBF-A; CBF-B; NF-YB | Nuclear transcription factor Yb |
| NUFIP2 | NM_020772 | 17q11.2 | PIG1; 82-FIP; FIP-82; 182-FIP | Nuclear fragile X mental retardation protein interacting protein |
| PAG1 | NM_018440 | 8q21.13 | CBP; PAG | Phosphoprotein membrane anchor with glycosphingolipid microdomains 1 |
| PALM2 | NM_053016 | 9q31.3 | AKAP2 | paralemmin 2 |
| PAPD5 | NM_001040284 | 16q12.1 | TRF4-2 | PAP associated domain containing 5 |
| PDE5A | NM_033430 | 4q27 | CN5A; PDE5; CGB-PDE | Phosphodiesterase 5A, cGMP-specific |
| PGAP1 | NM_024989 | 2q33.1 | Bst1; MRT42; SPG67; ISPD3024 | Post-GPI attachment to proteins 1 |
| PGR | NM_000926 | 11q22-q23 | PR; NR3C3 | Progesterone receptor |
| PHACTR2 | NM_014721 | 6q24.2 | C6orf56 | Phosphatase and actin regulator 2 |
| PHC3 | NM_024947 | 3q26.2 | EDR3; HPH3 | Polyhomeotic homolog 3 |
| PHF20L1 | NM_016018 | 8q24.22 | CGI-72; TDRD20B | PHD finger protein 20-like 1 |
| POLI | NM_007195 | 18q21.1 | RAD30B; RAD30B | Polymerase (DNA directed) iota |
| PPP1R3B | NM_024607 | 8p23.1 | GL; PTG; PPP1R4 | Protein phosphatase 1, regulatory subunit 3B |
| PPP1R9A | NM_017650 | 7q21.3 | NRB1; NRBI; Neurabin-I | Protein phosphatase 1, regulatory subunit 9A |
| PRKAA2 | NM_006252 | 1p31 | AMPK; AMPK2; PRKAA; AMPKa2 | Protein kinase, AMP-activated, a2 catalytic subunit |
| PTBP3 | NM_005156 | 9q32 | ROD1 | Polypyrimidine tract binding protein 3 |
| PTPRT | NM_007050 | 20q12-q13 | RPTPrho | Protein tyrosine phosphatase, receptor type, T |
| PURB | NM_033224 | 7p13 | PURBETA | Purine-rich element binding protein B |
| QKI | NM_206853 | 6q26 | QK; Hqk; QK1; QK3; hqk1 | QKI, KH domain containing, RNA binding |

| | | | | | |
|---------|--------------|---------------|--|---|---|
| RAB3IP | NM_001024647 | 12q15 | RABIN3 | RAB3A interacting protein | |
| RAB3IP | NM_175624 | 12q15 | RABIN3 | RAB3A interacting protein | |
| RIMKLA | NM_173642 | 1p34.2 | NAAGS; FAM80A; NAAGS-II | Ribosomal modification protein rimK-like family member A | |
| RNF8 | NM_003958 | 6p21.3 | hRNF8 | Ring finger protein 8, E3 ubiquitin protein ligase | |
| RPS6KA3 | NM_004586 | Xp22.2-p22.1 | CLS; RSK; HU-3; RSK2; MRX19; ISPK-1; p90-RSK2; pp90RSK2; MAPKAPK1B; S6K-alpha3 | Ribosomal protein S6 kinase, 90 kDa, polypeptide 3 | |
| SCD | NM_005063 | 10q24.31 | SCD1; FADS5; SCDO5; MSTP008 | Stearoyl-CoA desaturase (d-9-desaturase) | |
| SEMA5A | NM_003966 | 5p15.2 | semF; SEMAF | Sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A | |
| SERTAD2 | NM_014755 | 2p14 | Sei-2; TRIP-Br2 | SERTA domain containing 2 | |
| SLC1A2 | NM_004171 | 11p13-p12 | EAAT2; GLT-1 | Solute carrier family 1 (glial high affinity glutamate transporter), member 2 | |
| SMAD5 | NM_001001419 | 5q31 | DWFC; JV5-1; MADH5 | SMAD family member 5 | |
| SMAD7 | NM_005904 | 18q21.1 | CRCS3; MADH7; MADH8 | SMAD family member 7 | |
| SNX1 | NM_003099 | 15q22.31 | VPS5; HsT17379 | Sorting nexin 1 | |
| SSX2IP | NM_014021 | 1p22.3 | ADIP | Synovial sarcoma, X breakpoint 2 interacting protein | |
| ST8SIA3 | NM_015879 | 18q21.31 | SIAT8C; ST8SiaIII | ST8 a-N-acetyl-neuraminide a-2,8-sialyltransferase 3 | |
| STK4 | NM_006282 | 20q11.2-q13.2 | KRS2; MST1; YSK3; TIIC | Serine/threonine kinase 4 | |
| TET2 | NM_017628 | 4q24 | MDS; KIAA1546 | Tet methylcytosine dioxygenase 2 | √ |

| | | | | | |
|---------|-----------|----------|---|--|--|
| THRB | NM_000461 | 3p24.2 | GRTH; PRTH; THR1; ERBA2; NR1A2; THRB1; THRB2; C-ERBA-2; C-ERBA- BETA | Thyroid hormone receptor-b | |
| TMEM196 | NM_152774 | 7p21.1 | | Transmembrane protein 196 | |
| TMF1 | NM_007114 | 3p21-p12 | TMF; ARA160 | TATA element modulatory factor 1 | |
| TNPO1 | NM_002270 | 5q13.2 | MIP; TRN; IPO2; MIP1; KPNB2 | Transportin 1 | |
| TRIM2 | NM_015271 | 4q31.3 | CMT2R; RNF86 | Tripartite motif containing 2 | |
| UBTF | NM_014233 | 17q21.31 | UBF; UBF1; UBF2; UBF-1; NOR-90 | Upstream binding transcription factor, RNA polymerase | |
| USP31 | NM_020718 | 16p12.2 | | Ubiquitin specific peptidase 31 | |
| VPS36 | NM_016075 | 13q14.3 | EAP45; C13orf9; CGI-145 | Vacuolar protein sorting 36 homolog (<i>S. cerevisiae</i>) | |
| XK | NM_021083 | Xp21.1 | KX; NA; NAC; X1k; XKR1; MCLDS | X-linked Kx blood group | |
| XPO4 | NM_022459 | 13q11 | exp4 | Exportin 4 | |
| XYLT1 | NM_022166 | 16p12.3 | XT1; XTI; XT-I; DBQD2; XYLT1; PXYLT1 | Xylosyltransferase I | |
| ZFP14 | NM_020917 | 19q13.12 | ZNF531 | ZFP14 zinc finger protein | |
| ZFP62 | NM_152283 | 5q35.3 | ZET; ZNF755 | ZFP62 zinc finger protein | |
| ZNF117 | NM_015852 | 7q11.21 | HPF9; H-plk | Zinc finger protein 117 | |
| ZNF493 | NM_175910 | 19p12 | | Zinc finger protein 493 | |
| ZNF781 | NM_152605 | 19q13.12 | | Zinc finger protein 781 | |