

Supplementary Material

sTable1: The interactions of Hub gene and targeted drug

search_term	match_term	match_type	gene	drug	interaction_types	sources	pmids
CXCL8	CXCL8	Definite	CXCL8	ABX-IL8	inhibitor	ChEMBL interactions TTD	
CXCL8	CXCL8	Definite	CXCL8	HUMAX-IL8	inhibitor	ChEMBL interactions	
CXCL8	CXCL8	Definite	CXCL8	LEFLUNOMIDE		NCI	10902750
CXCL8	CXCL8	Definite	CXCL8	YANGONIN		DTC	
CXCL8	CXCL8	Definite	CXCL8	E319		DTC	
CXCL8	CXCL8	Definite	CXCL8	FOSCARNET		NCI	10630964
CXCL8	CXCL8	Definite	CXCL8	NAPROXEN		NCI	11852880
CXCL8	CXCL8	Definite	CXCL8	ALDRIN		DTC	
CXCL8	CXCL8	Definite	CXCL8	COLCHICINE		DTC	
CXCL8	CXCL8	Definite	CXCL8	MIDAZOLAM		NCI	9620522
CXCL8	CXCL8	Definite	CXCL8	FENTANYL		NCI	9527747
CXCL8	CXCL8	Definite	CXCL8	ACETAMINOPHEN		NCI	15878691
CXCL8	CXCL8	Definite	CXCL8	CORONOPILIN		DTC	
CXCL8	CXCL8	Definite	CXCL8	DIPYRIDAMOLE		NCI	10660968
CXCL8	CXCL8	Definite	CXCL8	IBUPROFEN		TTD	
CXCL8	CXCL8	Definite	CXCL8	IONOMYCIN		NCI	7510691
CXCL8	CXCL8	Definite	CXCL8	CHLORDANE		DTC	

CXCL8	CXCL8	Definite	CXCL8	DANAZ OL	NCI	1616145 1
CXCL8	CXCL8	Definite	CXCL8	CHEMB L190207 4	DTC	
CXCL8	CXCL8	Definite	CXCL8	OMEPR AZOLE DINITR O	NCI	1712296 5
CXCL8	CXCL8	Definite	CXCL8	CRESO L	DTC	
CXCL8	CXCL8	Definite	CXCL8	QUESTI OMYCI N B	DTC	
CXCL8	CXCL8	Definite	CXCL8	FENRET INIDE	NCI	1697911 9
CXCL8	CXCL8	Definite	CXCL8	HEPTA CHLOR	DTC	
CXCL8	CXCL8	Definite	CXCL8	PYROG ALLOL	DTC	
CXCL8	CXCL8	Definite	CXCL8	CANER TINIB	NCI	1595625 1
CXCL8	CXCL8	Definite	CXCL8	HYDRO QUINO NE	DTC NC I	1711862 2
CXCL8	CXCL8	Definite	CXCL8	ENDOS ULFAN	DTC	
CXCL8	CXCL8	Definite	CXCL8	EMODI N	DTC	
CXCL8	CXCL8	Definite	CXCL8	LANSO PRAZO LE	NCI	1712296 5
CXCL8	CXCL8	Definite	CXCL8	RETINA L	DTC	
CXCL8	CXCL8	Definite	CXCL8	HARMI NE	DTC	
CXCL8	CXCL8	Definite	CXCL8	HYDRO CHLORI DE	DTC	
CXCL8	CXCL8	Definite	CXCL8	PACLIT AXEL	NCI	9271387
CXCL8	CXCL8	Definite	CXCL8	BEVACI ZUMAB	PharmG KB	2358470 1

CXCL8	CXCL8	Definite	CXCL8	PAMID RONIC ACID	NCI	1200652 2
CXCL8	CXCL8	Definite	CXCL8	TALC	NCI	1700055 6
CXCL8	CXCL8	Definite	CXCL8	TRETIN OIN	NCI	8900181
CXCL8	CXCL8	Definite	CXCL8	SUNITI NIB	PharmG KB	2638781 2
CXCL8	CXCL8	Definite	CXCL8	CETUXI MAB	NCI	1061471 6 159086 64 10037 173
CXCL8	CXCL8	Definite	CXCL8	CHEMB L157913 0	DTC	
CXCL8	CXCL8	Definite	CXCL8	ALPRA ZOLAM METHI	NCI	1221815 4
CXCL8	CXCL8	Definite	CXCL8	MAZOL E	NCI	1145352 4
CXCL8	CXCL8	Definite	CXCL8	RETINO L	DTC	
CXCL8	CXCL8	Definite	CXCL8	RIBAVI RIN	DTC	
CXCL8	CXCL8	Definite	CXCL8	TERFEN ADINE	NCI	8919641
CXCL8	CXCL8	Definite	CXCL8	DICYCL OHEXY LCARB ODIIMI DE	DTC	
CXCL8	CXCL8	Definite	CXCL8	CEFTRI AXONE	NCI	8011012
CXCL8	CXCL8	Definite	CXCL8	ASPIRI N	NCI	1257644 2
CXCL8	CXCL8	Definite	CXCL8	CLARIT HROMY CIN	NCI	1200396 7
CXCL8	CXCL8	Definite	CXCL8	DACAR BAZINE	DTC	
CXCL8	CXCL8	Definite	CXCL8	PENTO XIFYLL INE	NCI	1257644 2

CXCL8	CXCL8	Definite	CXCL8	CIDOFO VIR		NCI	1063096 4
CXCL8	CXCL8	Definite	CXCL8	BROXU RIDINE		DTC	
CXCL8	CXCL8	Definite	CXCL8	TROGLI TAZON E		NCI	1236445 6
CXCL8	CXCL8	Definite	CXCL8	DICHLO RVOS		DTC	
CXCL8	CXCL8	Definite	CXCL8	VERAP AMIL		NCI	2686646
MMP9	MMP9	Definite	MMP9	MARIM ASTAT	inhibitor	TdgClini calTrial TEND	1723418 0 127636 61 11752 352
MMP9	MMP9	Definite	MMP9	PRINO MASTA T	vaccine	TALC	
MMP9	MMP9	Definite	MMP9	ANDEC ALIXIM AB	inhibitor antibody	ChemblI nteractio ns TTD	
MMP9	MMP9	Definite	MMP9	S-3304 CURCU MIN	vaccine	TALC	
MMP9	MMP9	Definite	MMP9	PYRAZ OLE		DTC	1912897 7
MMP9	MMP9	Definite	MMP9	TOZUL ERISTI DE		TTD	
MMP9	MMP9	Definite	MMP9	CURCU MIN		TTD	
MMP9	MMP9	Definite	MMP9	INCYCL INIDE		TdgClini calTrial	
MMP9	MMP9	Definit e	MMP9	BEVACI ZUMAB CARBO XYLAT		CIViC	2692126 5
MMP9	MMP9	Definit e	MMP9	ED GLUCO SAMIN E		DTC	1661649 0
MMP9	MMP9	Definit e	MMP9	DEMET HYLWE DELOL		DTC	2292622 6

MMP9	MMP9	Definite	MMP9	ACTONE CELECOXIB		PharmKB	22336956 10567199 161973
PTGS2	PTGS2	Definite	PTGS2	MELOXICAM	inhibitor	PharmKB TdgClinicalTrial ChembII nteractions TEND PharmKB TTD	63 10220944 11752352 10381787 10340919 10381057 30774225 19602986
PTGS2	PTGS2	Definite	PTGS2	NIMESULIDE	inhibitor	PharmKB	16846549 11752352
PTGS2	PTGS2	Definite	PTGS2	MECLOFENAMATE SODIUM NAPROXEN ETEMSIL	inhibitor	ChembII nteractions	
PTGS2	PTGS2	Definite	PTGS2	IBUPROFEN	inhibitor	ChembII nteractions TEND PharmKB TTD	25502615 15481334 12852704 11752352 1556152 15494133 16678543 14510637 19602986
PTGS2	PTGS2	Definite	PTGS2	SUPROFEN	inhibitor	TdgClinicalTrial ChembII nteractions TEND	11885959 17139284 10377455 17016423

PTGS2	PTGS2	Definite	PTGS2	PIROXICAM	inhibitor	TdgClinicalTrial ChEMBL Interactions	1195215 5 117857 74 11153 163 1175 2352 154 64832 10 381057
PTGS2	PTGS2	Definite	PTGS2	OXYPHENBUTAZONE BROMFENAC SODIUM	inhibitor	ChEMBL Interactions	
PTGS2	PTGS2	Definite	PTGS2	IBUPROFEN LYSINE	inhibitor	ChEMBL Interactions	
PTGS2	PTGS2	Definite	PTGS2	ETODOLAC	inhibitor	TdgClinicalTrial ChEMBL Interactions TEND PharmKB TTD	1282491 8 110090 46 11275 997 1175 2352 105 94327 15 198222 1 9602986
PTGS2	PTGS2	Definite	PTGS2	AMINOSALICYLIC POTASSIUM	inhibitor	ChEMBL Interactions	
PTGS2	PTGS2	Definite	PTGS2	KETOROLAC	inhibitor	TdgClinicalTrial ChEMBL Interactions TEND TTD	1451371 8 117293 62 11752 352 1181 4865 151 98222 10 895904
PTGS2	PTGS2	Definite	PTGS2	NAPROXEN	inhibitor	TdgClinicalTrial ChEMBL Interactions	
PTGS2	PTGS2	Definite	PTGS2	CELECOXIB	inhibitor	TALC TdgClinic	1209331 1 120862

						alTrial C hemblInt eractions MyCanc erGenom eClinical Trial Pha rmGKB TTD	92 12055 598 1175 2352 120 86402 12 104042 2 2336956 1960298 6
PTGS2	PTGS2	Definit e	PTGS2	DICLOF ENAC SODIU M	inhibitor	ChemblI nteractio ns	
PTGS2	PTGS2	Definit e	PTGS2	DIFLUN ISAL	inhibitor	TdgClini calTrial ChemblI nteractio ns TEND TTD	1131537 5 873774 8 128524 83 11673 972 1082 5891 117 52352
PTGS2	PTGS2	Definit e	PTGS2	CARPR OFEN	inhibitor	TdgClini calTrial ChemblI nteractio ns TEND TTD	1593962 2 117523 52 17181 139 1170 3020 151 98222 10 895904
PTGS2	PTGS2	Definit e	PTGS2	ACETA MINOP HEN	inhibitor	TdgClini calTrial ChemblI nteractio ns TEND	1788497 4 173221 16 17175 104 1175 2352
PTGS2	PTGS2	Definit e	PTGS2	FENOP ROFEN CALCIU M	inhibitor	ChemblI nteractio ns	
PTGS2	PTGS2	Definit e	PTGS2	DICLOF ENAC EPOLA MINE	inhibitor	ChemblI nteractio ns	
PTGS2	PTGS2	Definit e	PTGS2	NS-398	inhibitor	DTC	2177515 2 191721 46 16480

							277 2545 3792 1256466 2 201437 79 15494
PTGS2	PTGS2	Definite	PTGS2	VALDE COXIB	inhibitor	DTC ChemblInteractions PharmKB TTD	548 1071 5145 117 52352 12 644588 1 2167567 1106083 3 196029 86
PTGS2	PTGS2	Definite	PTGS2	BROMF ENAC	inhibitor	TdgClinicalTrial TEND	1698228 9 168465 46 12016 548
PTGS2	PTGS2	Definite	PTGS2	OLSAL AZINE SODIUM	inhibitor	ChemblInteractions	
PTGS2	PTGS2	Definite	PTGS2	ETORIC OXIB	inhibitor	TdgClinicalTrial ChemblInteractions TEND PharmKB TTD	1757312 8 171641 36 17691 997 1175 2352 171 39284 17 016423 1 9602986
PTGS2	PTGS2	Definite	PTGS2	BISMUTH SUBSALICYLATE	inhibitor	ChemblInteractions	
PTGS2	PTGS2	Definite	PTGS2	NABUM ETONE	inhibitor	TdgClinicalTrial ChemblInteractions TEND TTD	1130469 9 120474 90 11153 163 1175 2352 154 56329 76 15202
PTGS2	PTGS2	Definite	PTGS2	FENOP ROFEN	inhibitor	TdgClinicalTrial TEND	1705079 8

PTGS2	PTGS2	Definite	PTGS2	NEPAFENAC	inhibitor	TdgClinicalTrial ChemblInteractions TEND	10850857
PTGS2	PTGS2	Definite	PTGS2	DICLOFENAC	inhibitor	TdgClinicalTrial ChemblInteractions TEND PharmGKB	12705061 12925531 12588370 1252704 12534640 1960298614965322 15017615 14552704 15177307 11752352 15655513 19602986
PTGS2	PTGS2	Definite	PTGS2	LUMIRACOXIB	inhibitor	TdgClinicalTrial TEND PharmGKB TTD	15 14552704 15177307 11752352 15655513 19602986
PTGS2	PTGS2	Definite	PTGS2	NAPROXEN SODIUM	inhibitor	ChemblInteractions	
PTGS2	PTGS2	Definite	PTGS2	KETOROLAC TROMETHAMINE	inhibitor	ChemblInteractions	15668944 24697244 15730717 20684598 15831440 22818041 15770365 10381057 15667901 19602986
PTGS2	PTGS2	Definite	PTGS2	INDOMETHACIN	inhibitor	DTC ChemblInteractions TEND PharmGKB TTD	717 20684598 15831440 22818041 15770365 10381057 15667901 19602986
PTGS2	PTGS2	Definite	PTGS2	TOLMETIN	inhibitor	ChemblInteractions	

PTGS2	PTGS2	Definite	PTGS2	SODIUM FLURBIPROFEN SODIUM	inhibitor	ChEMBL interactions	
PTGS2	PTGS2	Definite	PTGS2	OXAPROZIN POTASSIUM	inhibitor	ChEMBL interactions	
PTGS2	PTGS2	Definite	PTGS2	ASPIRIN	inhibitor	ChEMBL interactions TEND CIViC PharmGKB	17522398
PTGS2	PTGS2	Definite	PTGS2	KETOROLAC	inhibitor	TdgClinicalTrial TEND	09 14568 028 1456 8029 151 02535 12 110513 1933857
PTGS2	PTGS2	Definite	PTGS2	OXAPROZIN	inhibitor	TdgClinicalTrial ChEMBL interactions TEND	9 983133 1 965085 2 199524 16 12065 695 1702 4689
PTGS2	PTGS2	Definite	PTGS2	MESALAMINE	inhibitor	TdgClinicalTrial ChEMBL interactions TEND	1685517 8 124634 55 14742 690 1220 8114 925 6165
PTGS2	PTGS2	Definite	PTGS2	TOLMETIN	inhibitor	TdgClinicalTrial TEND TD	0 104656 90 92539 54 11752 352 1739 1279 154 58776

PTGS2	PTGS2	Definite	PTGS2	PARECOXIB	inhibitor	TdgClinicalTrial	10794682
PTGS2	PTGS2	Definite	PTGS2	SULFASALAZINE	inhibitor	TdgClinicalTrial ChEMBLinteractions	16855178 12463455 14742690 12208114 925616510393680 157927
PTGS2	PTGS2	Definite	PTGS2	MEFENAMICACID	inhibitor	ChEMBLinteractions	81 9626023 17150210 7832763 11752352
PTGS2	PTGS2	Definite	PTGS2	POLMICOXIB	inhibitor	TdgClinicalTrial ChEMBLinteractions TTD	11563332 16245223 9152412 11752352 15943176 157569319711054
PTGS2	PTGS2	Definite	PTGS2	TENOXICAM	inhibitor	TdgClinicalTrial TEND TTD	10452868 16808554 1290103217604186 17612049 17607546 11752352 17521299 17532719 19602986 30247840
PTGS2	PTGS2	Definite	PTGS2	SALSALATE	inhibitor	TdgClinicalTrial TEND	10452868 16808554 1290103217604186 17612049 17607546 11752352 17521299 17532719 19602986 30247840
PTGS2	PTGS2	Definite	PTGS2	NAPROXEN	inhibitor	TdgClinicalTrial ChEMBLinteractions TEND PharmGKB TTD	10452868 16808554 1290103217604186 17612049 17607546 11752352 17521299 17532719 19602986 30247840
PTGS2	PTGS2	Definite	PTGS2	APRICOXIB	inhibitor	TALC TdgClinic	

						alTrial ChemblInteractions	
PTGS2	PTGS2	Definite	PTGS2	SULINDAC	inhibitor	TdgClinicalTrial ChemblInteractions TEND	1111804 2 103728 26 10657 949 1048 5483 110 78056
PTGS2	PTGS2	Definite	PTGS2	DICLOFENAC POTASSIUM	inhibitor	ChemblInteractions	
PTGS2	PTGS2	Definite	PTGS2	IBUPROFEN SODIUM	inhibitor	ChemblInteractions	
PTGS2	PTGS2	Definite	PTGS2	PHENYLBUTAZONE	inhibitor	TdgClinicalTrial ChemblInteractions TEND TTD	1593962 2 154898 88 12213 119 1175 2352
PTGS2	PTGS2	Definite	PTGS2	BALSALAZIDE	inhibitor	TdgClinicalTrial	1798126 2 129504 15 17139 284 1701 6423 197 43890 1058045 8 113989 14 10566 562 1055 5907 106 43177 10 693877 2 0724158 1175235 2 189225 70 20166 930 1667 8543 196 02986
PTGS2	PTGS2	Definite	PTGS2	ROFECOXIB	inhibitor	TdgClinicalTrial ChemblInteractions PharmGKB TTD	

PTGS2	PTGS2	Definite	PTGS2	FLURBIPROFEN	inhibitor	DTC Tdg ClinicalT rial Che mbIInter actions T END TT D	1009167 4 109771 31 10773 011 1100 6278 114 05284 17 562170 1 9066416 1271089 2 154465 66 15982 930 2150 7989 155 98423 15 892618
PTGS2	PTGS2	Definite	PTGS2	THALIDOMIDE	antagonist	TdgClini calTrial	
PTGS2	PTGS2	Definite	PTGS2	BALSALAZIDE DISODIUM	inhibitor	ChemblI nteractio ns	
PTGS2	PTGS2	Definite	PTGS2	AMINO SALICYLATE SODIUM	inhibitor	ChemblI nteractio ns	
PTGS2	PTGS2	Definite	PTGS2	DEXIBUPROFEN	inhibitor	DTC	2014377 9 280098 27
PTGS2	PTGS2	Definite	PTGS2	CYCLOSPORINE		NCI	1099993 9
PTGS2	PTGS2	Definite	PTGS2	RWJ-67657		TTD	
PTGS2	PTGS2	Definite	PTGS2	HYDROXYCHLOROQUINE		NCI	1496369 5
PTGS2	PTGS2	Definite	PTGS2	URSOLIC ACID		DTC	9784154
PTGS2	PTGS2	Definite	PTGS2	IMRECOXIB		TTD	
PTGS2	PTGS2	Definite	PTGS2	(R)-IBUPROPHEN		DTC	2014377 9

PTGS2	PTGS2	Definite	PTGS2	CIMICO XIB	TdgClini calTrial TTD	1548199 3
PTGS2	PTGS2	Definite	PTGS2	RALOXI FENE	NCI	1524328 1
PTGS2	PTGS2	Definite	PTGS2	CURCU MIN	DTC TT D	2492038 1
PTGS2	PTGS2	Definite	PTGS2	CAPECI TABINE	PharmG KB	1921960 2
PTGS2	PTGS2	Definite	PTGS2	LICOFE LONE	TdgClini calTrial	1701564 0
PTGS2	PTGS2	Definite	PTGS2	ATENO LOL	PharmG KB	
PTGS2	PTGS2	Definite	PTGS2	DERSA LAZINE	TdgClini calTrial	
PTGS2	PTGS2	Definite	PTGS2	RESERP INE	NCI	1608106 3
PTGS2	PTGS2	Definit e	PTGS2	CHEMB L217111 7	DTC	2282290 8
PTGS2	PTGS2	Definit e	PTGS2	FENBU FEN	TTD	
PTGS2	PTGS2	Definit e	PTGS2	OXALIP LATIN	PharmG KB	1921960 2
PTGS2	PTGS2	Definit e	PTGS2	DARBU FELON E	TTD	
PTGS2	PTGS2	Definit e	PTGS2	VB-201	TdgClini calTrial	
PTGS2	PTGS2	Definit e	PTGS2	E163	DTC	1007576 3
PTGS2	PTGS2	Definit e	PTGS2	CURCU MIN PYRAZ OLE	DTC	2492038 1
FOS	FOS	Definit e	FOS	DAIDZE IN	NCI	8593857
FOS	FOS	Definit e	FOS	PHENO BARBIT AL	NCI	9187311
FOS	FOS	Definit e	FOS	THROM BIN	NCI	2119237
FOS	FOS	Definit e	FOS	NIMODI PINE	NCI	8301097

FOS	FOS	Definite	FOS	ANTIBIOTIC	NCI	15773551
FOS	FOS	Definite	FOS	ALCOHOL	NCI	16750178
FOS	FOS	Definite	FOS	PACLITAXEL	NCI	9588740
FOS	FOS	Definite	FOS	PILOCARPINE	NCI	9661997
FOS	FOS	Definite	FOS	BACLOFEN	NCI	11301212
FOS	FOS	Definite	FOS	BROMOCRIPTINE	NCI	11680511
EGR1	EGR1	Definite	EGR1	GENIPIRIN	DTC	26283511
FCGR3B	FCGR3B	Definite	FCGR3B	LACTULOSE	NCI	1418064
FCGR3B	FCGR3B	Definite	FCGR3B	SODIUM CHLORIDE	NCI	17187818
FCGR3B	FCGR3B	Definite	FCGR3B	PENICILLIN G POTASSIUM	NCI	17257217
FCGR3B	FCGR3B	Definite	FCGR3B	PREDNISOLONE	NCI	17329922
FCGR3B	FCGR3B	Definite	FCGR3B	ALDESLERKIN	NCI	25285931827816
FCGR3B	FCGR3B	Definite	FCGR3B	EPOETIN ALFA	NCI	1300984
FCGR3B	FCGR3B	Definite	FCGR3B	GELDAMYCIN	NCI	7662976
FCGR3B	FCGR3B	Definite	FCGR3B	MAFOSFAMIDE	NCI	1515095
FCGR3B	FCGR3B	Definite	FCGR3B	PROGESTERONE	NCI	16635211
FCGR3B	FCGR3B	Definite	FCGR3B	METHOTREXATE	NCI	9811059

FCGR3 B	FCGR3 B	Definite	FCGR3B	CYCLO SPORIN E		NCI	1785245 3
FCGR3 B	FCGR3 B	Definite	FCGR3B	DOXOR UBICIN		NCI	1830717
FCGR3 B	FCGR3 B	Definite	FCGR3B	METHI MAZOL E		NCI	1276136 0
FCGR3 B	FCGR3 B	Definite	FCGR3B	FENTA NYL		NCI	1177280 8
FCGR3 B	FCGR3 B	Definite	FCGR3B	INDOM ETHACI N		NCI	1732992 2
FCGR3 B	FCGR3 B	Definite	FCGR3B	CHOLE CALCIF EROL		NCI	9811059
FCGR3 B	FCGR3 B	Definite	FCGR3B	THALID OMIDE		NCI	1545713 3
FCGR3 B	FCGR3 B	Definite	FCGR3B	HEPARI N		NCI	1849225 4
FCGR3 B	FCGR3 B	Definite	FCGR3B	PUROM YCIN		NCI	8423352
CCR1	CCR1	Definite	CCR1	AZD481 8	antagoni st	ChembII nteractio ns	
CCR1	CCR1	Definite	CCR1	BMS- 817399	antagoni st	TTD	
CCR1	CCR1	Definite	CCR1	CCX354	antagoni st	TdgClini calTrial ChembII nteractio ns TTD	
CCR1	CCR1	Definite	CCR1	TERPY RIDINE		DTC	2295789 0
CCR1	CCR1	Definite	CCR1	CHEMB L220580 5		DTC	2295789 0
FPR1	FPR1	Definite	FPR1	CHEMB L129025 1	agonist	DTC	2087031 3
FPR1	FPR1	Definite	FPR1	CHEMB L129036 5		DTC	2087031 3

FPR1	FPR1	Definite	FPR1	SULFIN PYRAZ ONE PHENY	DTC
FPR1	FPR1	Definite	FPR1	LBUTA ZONE REBAM	DTC
FPR1	FPR1	Definite	FPR1	IPIDE PENICI	TTD
FPR1	FPR1	Definite	FPR1	LLIN G POTASS IUM	DTC

sTable 2: The pairs of mRNA-miRNA relationships

Gene	miRNA	miRanda	miRDB	TargetScan	Sum
PTGS2	hsa-miR-3120-3p	1	1	1	3
EGR1	hsa-miR-3185	1	1	1	3
EGR1	hsa-miR-1911-5p	1	1	1	3
FCGR3B	hsa-miR-890	1	1	1	3
PTGS2	hsa-miR-302a-5p	1	1	1	3
FOS	hsa-miR-3065-3p	1	1	1	3
FOS	hsa-miR-3140-3p	1	1	1	3
FCGR3B	hsa-miR-330-5p	1	1	1	3
FOS	hsa-miR-634	1	1	1	3
CXCL1	hsa-miR-944	1	1	1	3
FOS	hsa-miR-3183	1	1	1	3
PTGS2	hsa-miR-3121-3p	1	1	1	3
FOS	hsa-miR-603	1	1	1	3
PTGS2	hsa-miR-1200	1	1	1	3
FCGR3B	hsa-miR-519e-5p	1	1	1	3
EGR1	hsa-miR-936	1	1	1	3
FOS	hsa-miR-155-5p	1	1	1	3
PTGS2	hsa-miR-542-3p	1	1	1	3
FOS	hsa-miR-181a-5p	1	1	1	3
EGR1	hsa-miR-16-1-3p	1	1	1	3
FCGR3B	hsa-miR-149-5p	1	1	1	3
PTGS2	hsa-miR-3180-5p	1	1	1	3
CCR1	hsa-miR-518c-5p	1	1	1	3
CCR1	hsa-miR-1261	1	1	1	3
FOS	hsa-miR-1207-3p	1	1	1	3
CCR1	hsa-miR-629-5p	1	1	1	3
FOS	hsa-miR-548a-3p	1	1	1	3
FCGR3B	hsa-miR-571	1	1	1	3
PTGS2	hsa-miR-3065-5p	1	1	1	3
FOS	hsa-miR-335-3p	1	1	1	3
FCGR3B	hsa-miR-3149	1	1	1	3
FOS	hsa-miR-3148	1	1	1	3
FCGR3B	hsa-miR-515-5p	1	1	1	3
FOS	hsa-miR-576-3p	1	1	1	3
FCGR3B	hsa-miR-326	1	1	1	3
CXCL1	hsa-miR-302c-5p	1	1	1	3
FOS	hsa-miR-502-3p	1	1	1	3
CCR1	hsa-miR-330-5p	1	1	1	3
EGR1	hsa-miR-2110	1	1	1	3
FCGR3B	hsa-miR-7-5p	1	1	1	3
PTGS2	hsa-miR-543	1	1	1	3

PTGS2	hsa-miR-641	1	1	1	3
PTGS2	hsa-miR-101-5p	1	1	1	3
FOS	hsa-miR-4251	1	1	1	3
EGR1	hsa-miR-191-5p	1	1	1	3
EGR1	hsa-miR-212-3p	1	1	1	3
CXCL1	hsa-miR-337-3p	1	1	1	3
EGR1	hsa-miR-23a-3p	1	1	1	3
PTGS2	hsa-miR-508-3p	1	1	1	3
PTGS2	hsa-miR-3182	1	1	1	3
PTGS2	hsa-miR-548x-3p	1	1	1	3
FOS	hsa-miR-3163	1	1	1	3
CXCL1	hsa-miR-449c-5p	1	1	1	3
FOS	hsa-miR-543	1	1	1	3
FOS	hsa-miR-490-5p	1	1	1	3
CXCL1	hsa-miR-551b-5p	1	1	1	3
CCR1	hsa-miR-495-3p	1	1	1	3
EGR1	hsa-miR-581	1	1	1	3
FOS	hsa-miR-424-3p	1	1	1	3
PTGS2	hsa-miR-125b-2-3p	1	1	1	3
PTGS2	hsa-miR-26b-5p	1	1	1	3
CCR1	hsa-miR-516a-3p	1	1	1	3
CXCL1	hsa-miR-1323	1	1	1	3
PTGS2	hsa-miR-4291	1	1	1	3
FOS	hsa-miR-221-3p	1	1	1	3
PTGS2	hsa-miR-513a-3p	1	1	1	3
FOS	hsa-miR-29c-3p	1	1	1	3
FCGR3B	hsa-miR-556-3p	1	1	1	3
FCGR3B	hsa-miR-3185	1	1	1	3
PTGS2	hsa-miR-802	1	1	1	3
EGR1	hsa-miR-132-3p	1	1	1	3
PTGS2	hsa-miR-607	1	1	1	3
FOS	hsa-miR-548d-3p	1	1	1	3
EGR1	hsa-miR-4251	1	1	1	3
FCGR3B	hsa-miR-136-5p	1	1	1	3
CXCL1	hsa-miR-935	1	1	1	3
CXCL1	hsa-miR-532-5p	1	1	1	3
FCGR3B	hsa-let-7b-3p	1	1	1	3
PTGS2	hsa-miR-1297	1	1	1	3
PTGS2	hsa-miR-4282	1	1	1	3
EGR1	hsa-miR-524-5p	1	1	1	3
FOS	hsa-miR-101-3p	1	1	1	3
EGR1	hsa-miR-4271	1	1	1	3
FCGR3B	hsa-miR-92a-1-5p	1	1	1	3
FCGR3B	hsa-miR-297	1	1	1	3

PTGS2	hsa-miR-374b-5p	1	1	1	3
FCGR3B	hsa-miR-567	1	1	1	3
FOS	hsa-miR-144-3p	1	1	1	3
EGR1	hsa-miR-377-3p	1	1	1	3
EGR1	hsa-miR-204-5p	1	1	1	3
FOS	hsa-miR-545-5p	1	1	1	3
EGR1	hsa-miR-4269	1	1	1	3
FOS	hsa-miR-873-5p	1	1	1	3
MMP9	hsa-miR-3123	1	1	1	3
PTGS2	hsa-miR-4251	1	1	1	3
CCR1	hsa-miR-193b-5p	1	1	1	3
FOS	hsa-miR-29a-3p	1	1	1	3
CCR1	hsa-miR-326	1	1	1	3
PTGS2	hsa-miR-628-5p	1	1	1	3
EGR1	hsa-miR-1264	1	1	1	3
EGR1	hsa-miR-600	1	1	1	3
FOS	hsa-miR-2053	1	1	1	3
CXCL1	hsa-miR-3121-3p	1	1	1	3
PTGS2	hsa-miR-944	1	1	1	3
PTGS2	hsa-miR-26a-5p	1	1	1	3
EGR1	hsa-miR-369-3p	1	1	1	3
PTGS2	hsa-miR-758-3p	1	1	1	3
EGR1	hsa-miR-30d-3p	1	1	1	3
FCGR3B	hsa-miR-525-5p	1	1	1	3
CXCL1	hsa-miR-3182	1	1	1	3
PTGS2	hsa-miR-545-3p	1	1	1	3
FOS	hsa-miR-501-3p	1	1	1	3
CXCL1	hsa-miR-3187-3p	1	1	1	3
FOS	hsa-miR-4279	1	1	1	3
CXCL1	hsa-miR-570-3p	1	1	1	3
PTGS2	hsa-miR-183-5p	1	1	1	3
FOS	hsa-miR-4267	1	1	1	3
FOS	hsa-miR-1253	1	1	1	3
FOS	hsa-miR-181c-5p	1	1	1	3
CXCL1	hsa-miR-561-3p	1	1	1	3
PTGS2	hsa-miR-633	1	1	1	3
FOS	hsa-miR-569	1	1	1	3
FCGR3B	hsa-let-7a-3p	1	1	1	3
EGR1	hsa-miR-506-3p	1	1	1	3
CCR1	hsa-miR-3154	1	1	1	3
PTGS2	hsa-miR-544b	1	1	1	3
EGR1	hsa-miR-760	1	1	1	3
PTGS2	hsa-miR-3163	1	1	1	3
PTGS2	hsa-miR-4274	1	1	1	3

FOS	hsa-miR-548x-3p	1	1	1	3
CXCL1	hsa-miR-2116-5p	1	1	1	3
PTGS2	hsa-miR-548g-3p	1	1	1	3
EGR1	hsa-miR-211-5p	1	1	1	3
FOS	hsa-miR-1244	1	1	1	3
FOS	hsa-miR-222-3p	1	1	1	3
CXCL1	hsa-miR-373-3p	1	1	1	3
FCGR3B	hsa-miR-3168	1	1	1	3
FCGR3B	hsa-let-7f-1-3p	1	1	1	3
EGR1	hsa-miR-23b-3p	1	1	1	3
FOS	hsa-miR-338-3p	1	1	1	3
PTGS2	hsa-miR-300	1	1	1	3
PTGS2	hsa-miR-132-3p	1	1	1	3
EGR1	hsa-miR-3121-3p	1	1	1	3
FOS	hsa-miR-29b-3p	1	1	1	3
CCR1	hsa-miR-149-3p	1	1	1	3
FPR1	hsa-miR-4300	1	1	1	3
MMP9	hsa-miR-3065-5p	1	1	1	3
PTGS2	hsa-miR-29b-1-5p	1	1	1	3
PTGS2	hsa-miR-381-3p	1	1	1	3
PTGS2	hsa-miR-1827	1	1	1	3
PTGS2	hsa-miR-101-3p	1	1	1	3
PTGS2	hsa-miR-3145-3p	1	1	1	3
PTGS2	hsa-miR-4324	1	1	1	3
PTGS2	hsa-miR-126-5p	1	1	1	3
FCGR3B	hsa-miR-148b-5p	1	1	1	3
FOS	hsa-miR-139-5p	1	1	1	3
FOS	hsa-miR-181b-5p	1	1	1	3
EGR1	hsa-miR-125b-2-3p	1	1	1	3
PTGS2	hsa-miR-548c-3p	1	1	1	3
PTGS2	hsa-miR-212-3p	1	1	1	3
MMP9	hsa-miR-149-5p	1	1	1	3
EGR1	hsa-miR-3119	1	1	1	3
CCR1	hsa-miR-126-5p	1	1	1	3
PTGS2	hsa-miR-548p	1	1	1	3

sTable 3: The pairs of miRNA-lncRNA relationships

miRNA	lncRNA
hsa-miR-7-5p	CDR1-AS
hsa-miR-802	CTA-414D7.1
hsa-miR-1200	LINC01043
hsa-miR-570-3p	RP11-10J21.4
hsa-miR-1207-3p	MUC19
hsa-miR-7-5p	RP11-830F9.6
hsa-miR-92a-1-5p	MUC2
hsa-miR-326	RP1-34P24.3
hsa-miR-515-5p	TLL10-AS1
hsa-miR-149-3p	C10orf91
hsa-miR-449c-5p	AC079779.7
hsa-miR-136-5p	CTD-2534I21.9
hsa-miR-149-5p	LINC01043
hsa-miR-515-5p	AC079779.7
hsa-miR-545-3p	LINC01070
hsa-miR-449c-5p	RP11-138B4.1
hsa-miR-7-5p	FLJ35934
hsa-miR-377-3p	LL22NC03-27C5.1
hsa-miR-873-5p	RP5-894D12.5
hsa-let-7a-3p	RP3-323A16.1
hsa-miR-193b-5p	MUC2
hsa-miR-338-3p	RP11-229P13.22
hsa-miR-1207-3p	RP11-326C3.10
hsa-miR-873-5p	RP11-102K13.5
hsa-miR-1207-3p	RP11-326C3.14
hsa-let-7a-3p	DPP10-AS2
hsa-miR-125b-2-3p	RP11-333E1.2
hsa-miR-377-3p	RP4-737E23.2
hsa-miR-1207-3p	TP73-AS1
hsa-miR-101-3p	AC091153.4
hsa-miR-338-3p	RP4-539M6.22
hsa-miR-449c-5p	RP11-458F8.4
hsa-miR-515-5p	RP13-507P19.2
hsa-miR-136-5p	RP11-526P6.1
hsa-miR-543	RP11-429B14.4
hsa-miR-532-5p	RP11-413M3.4
hsa-miR-7-5p	RP11-338K13.1
hsa-miR-92a-1-5p	RP11-13K12.1
hsa-miR-7-5p	RP11-932O9.4
hsa-miR-377-3p	CTD-3138B18.5
hsa-miR-149-3p	CTA-941F9.10

hsa-miR-149-5p	RP11-394A14.2
hsa-miR-338-3p	CTD-2292P10.2
hsa-miR-377-3p	RP11-210M15.1
hsa-miR-149-3p	AIRN
hsa-miR-338-3p	LINC01165
hsa-let-7a-3p	FAM230B
hsa-miR-335-3p	SLC8A1-AS1
hsa-miR-377-3p	LINC01002
hsa-miR-181a-5p	LL22NC03-27C5.1
hsa-miR-515-5p	RP13-580B18.4
hsa-miR-542-3p	RP4-671O14.7
hsa-miR-338-3p	RP11-780K2.1
hsa-miR-7-5p	AC006019.3
hsa-miR-338-3p	PCBP3-OT1
hsa-miR-542-3p	AC079586.1
hsa-miR-545-3p	LINC01165
hsa-miR-561-3p	RP11-231G3.1
hsa-miR-149-3p	LINC00265
hsa-miR-1200	LINC01123
hsa-miR-149-3p	RP11-311F12.1
hsa-miR-542-3p	RP11-157B13.7
hsa-miR-149-3p	LINC00689
hsa-miR-16-1-3p	CTD-3099C6.5
hsa-miR-873-5p	RP4-539M6.22
hsa-miR-515-5p	SPACA6P
hsa-miR-515-5p	AC093642.4
hsa-miR-126-5p	RP11-164O23.8
hsa-miR-297	CTA-929C8.6
hsa-miR-542-3p	LINC00917
hsa-miR-1200	CTD-2008P7.3
hsa-miR-338-3p	MCF2L-AS1
hsa-miR-338-3p	LINC01423
hsa-miR-1200	RP11-22M7.2
hsa-miR-515-5p	FAM74A1
hsa-miR-326	RP11-413M3.4
hsa-miR-873-5p	RP11-333E1.2
hsa-miR-1207-3p	CTD-2006K23.1
hsa-miR-302a-5p	RP11-343D2.11
hsa-miR-1200	RP11-627G23.1
hsa-miR-149-3p	CTA-315H11.2
hsa-miR-501-3p	LINC01165
hsa-miR-149-3p	RP11-153F5.7
hsa-miR-149-3p	LINC00173
hsa-miR-758-3p	AC079586.1

hsa-miR-139-5p	AC015849.16
hsa-miR-1207-3p	KCNQ1OT1
hsa-miR-149-3p	TMEM191A
hsa-miR-1207-3p	LINC00588
hsa-miR-338-3p	AC015849.16
hsa-miR-16-1-3p	RP11-50B3.4
hsa-miR-149-3p	RP11-186N15.3
hsa-miR-515-5p	LINC01002
hsa-miR-501-3p	AC141928.1
hsa-miR-7-5p	RP11-394A14.2
hsa-miR-1200	RP11-1129I3.1
hsa-miR-542-3p	LINC01224
hsa-miR-335-3p	CTA-392E5.1
hsa-miR-338-3p	SNHG14
hsa-miR-628-5p	RP11-311F12.1
hsa-miR-136-5p	SPACA6P
hsa-miR-543	AC113607.3
hsa-miR-760	AC006019.3
hsa-miR-139-5p	RP11-231D20.2
hsa-miR-513a-3p	RP11-474P2.6
hsa-miR-29a-3p	RP11-223P11.3
hsa-miR-326	MIR143HG
hsa-miR-149-3p	CTD-3193O13.1
hsa-miR-1200	LINC00689
hsa-miR-758-3p	LINC01224
hsa-miR-335-3p	RP11-146D12.2
hsa-miR-335-3p	RP11-335L23.4
hsa-miR-873-5p	RP11-96L7.2
hsa-miR-7-5p	LINC00662
hsa-miR-449c-5p	LINC01070
hsa-miR-760	RP11-394A14.2
hsa-miR-449c-5p	AC114783.1
hsa-miR-515-5p	CTD-2197I11.1
hsa-miR-516a-3p	AC137934.1
hsa-miR-515-5p	RP11-1217F2.15
hsa-miR-149-3p	MAFG-AS1
hsa-miR-1207-3p	AC005481.5
hsa-miR-873-5p	RP13-895J2.3
hsa-miR-449c-5p	LINC00265
hsa-miR-149-5p	CTD-2008P7.3
hsa-miR-338-3p	CTD-3138B18.5
hsa-miR-449c-5p	LINC01168
hsa-miR-335-3p	LINC01122
hsa-miR-449c-5p	RP11-338K13.1

hsa-miR-515-5p	CTD-3099C6.5
hsa-miR-149-3p	RP11-148K1.12
hsa-miR-490-5p	CDR1-AS
hsa-miR-193b-5p	RP11-527L4.2
hsa-miR-338-3p	GRM7-AS1
hsa-miR-515-5p	SNHG14
hsa-miR-149-3p	RP11-430G17.3
hsa-miR-126-5p	RP11-517O13.1
hsa-miR-149-3p	RP11-1348G14.8
hsa-miR-335-3p	RP11-96K19.4
hsa-miR-515-5p	AC084219.4
hsa-miR-515-5p	AC015849.16
hsa-miR-501-3p	RP11-244O19.1
hsa-miR-449c-5p	RP11-66N24.4
hsa-miR-449c-5p	AP001476.4
hsa-miR-149-3p	PAX8-AS1
hsa-miR-944	RP5-1077H22.2
hsa-miR-513a-3p	LL22NC03-N64E9.1
hsa-miR-297	AC084219.4
hsa-let-7a-3p	LPP-AS2
hsa-miR-515-5p	FAM74A7
hsa-miR-1207-3p	RP4-751H13.7
hsa-miR-149-3p	RP11-630C16.2
hsa-miR-758-3p	RP11-157B13.7
hsa-miR-7-5p	CTA-243E7.1
hsa-miR-556-3p	RP11-700J17.1
hsa-miR-513a-3p	AC009299.3
hsa-miR-449c-5p	RP4-539M6.22
hsa-miR-758-3p	RP11-15H20.6
hsa-miR-181a-5p	ZNF833P
hsa-miR-149-3p	CTD-2369P2.8
