



GSE55235

Figure S1 | Validation of Differently Expressed Genes The dataset GSE55235 was used to validate the expression of DE-NRGs (A-E).

Supplementary Table S1 NETs related gene**Gene ID**

HGNC symbol	Entrez Gene	Ensembl
ALPL	249	ENSG00000162551
BST1	683	ENSG00000109743
CD93	22918	ENSG00000125810
CEACAM3	1084	ENSG00000170956
CREB5	9586	ENSG00000146592
CRISPLD2	83716	ENSG00000103196
CSF3R	1441	ENSG00000119535
CYP4F3	4051	ENSG00000186529
DYSF	8291	ENSG00000135636
FCAR	2204	ENSG00000186431
FCGR3B	2215	ENSG00000162747
CPPED1	55313	ENSG00000103381
FPR1	2357	ENSG00000171051
FPR2	2358	ENSG00000171049
G0S2	50486	ENSG00000123689
HIST1H2BC	8347	ENSG00000180596
HPSE	10855	ENSG00000173083
CXCR1	3577	ENSG00000163464
CXCR2	3579	ENSG00000180871
KCNJ15	3772	ENSG00000157551
LILRB2	10288	ENSG00000131042
MGAM	8972	ENSG00000257335
MME	4311	ENSG00000196549
PDE4B	5142	ENSG00000184588
S100A12	6283	ENSG00000163221
SIGLEC5	8778	ENSG00000105501
SLC22A4	6583	ENSG00000197208
SLC25A37	51312	ENSG00000147454
TECPR2	9895	ENSG00000196663
TNFRSF10C	8794	ENSG00000173535
VNN3	55350	ENSG00000093134
AKT1	207	ENSG00000142208
AKT2	208	ENSG00000105221
ATG7	10533	ENSG00000197548
CLEC6A	93978	ENSG00000205846
CSF3	1440	ENSG00000108342
CTSG	1511	ENSG00000100448
CYBB	1536	ENSG00000165168
DNASE1	1773	ENSG00000213938
ELANE	1991	ENSG00000197561
ENTPD4	14573	ENSG00000197217
F3	2152	ENSG00000117525
HMGB1	3146	ENSG00000189403
IL17A	3605	ENSG00000112115
IL1B	3553	ENSG00000125538
IL6	3569	ENSG00000136244
IL8	3576	ENSG00000169429
IRAK4	51135	ENSG00000198001
ITGAM	3684	ENSG00000169896
ITGB2	3689	ENSG00000160255
KCNN3	3782	ENSG00000143603
MAPK1	5594	ENSG00000100030
MAPK3	5595	ENSG00000102882
MMP9	4218	ENSG00000100985
MPO	4353	ENSG00000005381

MTOR	2475	ENSG00000198793
PADI4	23569	ENSG00000159339
PTAFR	5724	ENSG00000169403
PIK3CA	5290	ENSG00000121879
RIPK1	8737	ENSG00000137275
RIPK3	11035	ENSG00000129465
SELP	6403	ENSG00000174175
SELPLG	6404	ENSG00000110876
SIGLEC14	10049587	ENSG00000254415
TLR2	7097	ENSG00000137462
TLR4	7099	ENSG00000136869
TLR7	51284	ENSG00000196664
TLR8	51311	ENSG00000101916
TNF	7124	ENSG00000232810

Supplementary Table S2 Primer sequences

Primer name	5' to 3'
CRISPLD2-Mouse-F	GGCCATCCCCATGTCAGAC
CRISPLD2-Mouse-R	CATCCCAAGTCATGTGTTCCA
CRISPLD2-Human-F	GCTGTCGCCGCTGCTACCGC
CRISPLD2-Human-R	GACGCCCCTTCTCCCCTGGT
IL-1 β -Mouse-F	GCAACTGTTCTGAACTCAACT
IL-1 β -Mouse-R	ATCTTTTGGGGTCCGTCAACT
IL-1 β -Human-F	AGCTACGAATCTCCGACCAC
IL-1 β -Human-R	CGTTATCCCATGTGTCGAAGAA
SLC25A37-Mouse-F	CCTACTCCACGATGCAGTAATG
SLC25A37-Mouse-R	AGTGAATTGACTGGAAGGGGATA
SLC25A37-Human-F	GATGGGGACAGCCGAGATG
SLC25A37-Human-R	ACCGGGTACATGACCGAGT
MMP9-Mouse-F	CTGGACAGCCAGACACTAAAG
MMP9-Mouse-R	CTCGCGGCAAGTCTTCAGAG
MMP9-Human-F	GGGACGCAGACATCGTCATC
MMP9-Human-R	TCGTCATCGTCGAAATGGGC
TLR7-mouse-F	TCCTTGGGGCTAGATGGTTTC
TLR7-mouse-R	TCCACGATCACATGGTTCTTTG
TLR7-Human-F	CATGCTCTGCTCTCTTCAACCAG
TLR7-Human-R	AGTGACATCACAGGGCAGAGTT
GAPDH-Mouse-F	AGGTCGGTGTGAACGGATTTG
GAPDH-Mouse-R	TGTAGACCATGTAGTTGAGGTCA
GAPDH-Human-F	GGAGCGAGATCCCTCCAAAAT
GAPDH-Human-R	GGCTGTTGTCATACTTCTCATGG
IL-6-Mouse-F	TAGTCCTTCCTACCCCAATTTCC
IL-6-Mouse-R	TTGGTCCTTAGCCACTCCTTC
IL-6-Human-F	ACTCACCTCTTCAGAACGAATTG
IL-6-Human-R	CCATCTTTGGAAGGTTTCAGGTTG

Supplementary Table S3 Differentially expressed gene

id	logFC	AveExpr	t	P.Value	adj.P.Val	B
FOSL2	-1.0958	8.701322	-10.1126	2.38E-16	2.90E-12	26.55866
CDKN1A	-1.11296	10.60289	-9.80277	1.02E-15	6.22E-12	25.1685
MTHFD2	-1.02161	8.350415	-9.19504	1.79E-14	7.27E-11	22.43089
FNBP4	-0.79333	9.043906	-8.913	6.76E-14	2.06E-10	21.15793
HNMT	0.714952	8.856746	8.727802	1.62E-13	2.95E-10	20.32209
RBM6	-0.58907	9.056273	-8.71836	1.69E-13	2.95E-10	20.27948
PRRC2C	-0.69165	9.314093	-8.44906	6.02E-13	9.17E-10	19.06513
WSB1	-0.58792	9.814044	-8.36143	9.08E-13	1.23E-09	18.67044
SNRNP70	-0.62148	10.57606	-8.1948	1.99E-12	2.42E-09	17.92078
CX3CR1	1.510088	8.721065	8.119002	2.83E-12	3.14E-09	17.58025
TMEM259	-0.95618	8.395433	-8.08002	3.40E-12	3.46E-09	17.40522
TLR7	1.127725	8.950663	7.985478	5.29E-12	4.90E-09	16.98118
CSN1S1	2.476803	10.13495	7.97255	5.62E-12	4.90E-09	16.92324
TAF1C	-0.86623	9.125913	-7.90321	7.78E-12	5.83E-09	16.61265
PDE1A	0.747995	9.997615	7.774448	1.42E-11	9.10E-09	16.03693
EPYC	1.233325	6.53363	7.71402	1.88E-11	1.09E-08	15.76721
BCL6	-0.73423	9.689067	-7.70155	1.99E-11	1.10E-08	15.71159
BLNK	0.705335	8.065189	7.656628	2.45E-11	1.30E-08	15.51136
VEGFA	-1.61844	9.213641	-7.61937	2.92E-11	1.48E-08	15.34542
MYC	-0.94815	9.365968	-7.58267	3.46E-11	1.69E-08	15.18214
CASP1	0.612612	9.321821	7.549928	4.03E-11	1.89E-08	15.03654
BAG3	-0.79526	9.382072	-7.51964	4.63E-11	2.06E-08	14.90198
SRRM2	-0.70574	11.55116	-7.51496	4.74E-11	2.06E-08	14.88117
MAFF	-1.25334	9.313194	-7.49588	5.17E-11	2.18E-08	14.79646
LINC00965	1.075337	9.392852	7.482585	5.50E-11	2.24E-08	14.73747
RTN1	0.692425	8.386781	7.409079	7.73E-11	2.95E-08	14.41161
UCP2	0.730722	11.13035	7.372571	9.15E-11	3.37E-08	14.25001
KDM6B	-0.96313	8.431216	-7.36673	9.40E-11	3.37E-08	14.22418
TMEM176	0.776979	11.12847	7.323953	1.14E-10	3.88E-08	14.03505
TMEM176B	0.758607	10.76766	7.299281	1.28E-10	4.23E-08	13.92608
THBS4	0.762235	12.09925	7.237644	1.70E-10	5.47E-08	13.65418
MFAP4	0.756344	10.08218	7.102697	3.16E-10	9.42E-08	13.06073
C1orf54	0.764369	10.98752	6.922255	7.21E-10	1.91E-07	12.27147
NKTR	-0.63437	9.450365	-6.88063	8.72E-10	2.22E-07	12.09017
CFI	0.871512	10.22852	6.801716	1.25E-09	3.10E-07	11.74722
CPVL	0.675988	8.818111	6.77954	1.38E-09	3.36E-07	11.65106
RHOBTB3	-0.80982	8.991422	-6.7195	1.81E-09	4.24E-07	11.39115
EFEMP1	0.691533	12.08888	6.679478	2.17E-09	4.89E-07	11.21825
INHBB	-0.84699	8.036241	-6.63746	2.62E-09	5.73E-07	11.0371
MEG3	-0.73303	10.10464	-6.63652	2.63E-09	5.73E-07	11.03306
SOGA1	-0.64087	8.655629	-6.61052	2.96E-09	6.33E-07	10.9211
QDPR	0.637637	9.265935	6.551656	3.85E-09	7.81E-07	10.66822
BST2	0.651473	9.748658	6.548551	3.90E-09	7.81E-07	10.6549
IFRD1	-0.6197	8.437401	-6.53847	4.08E-09	7.91E-07	10.61168
ARNTL	-0.73948	8.384749	-6.47759	5.36E-09	1.02E-06	10.35104
COL14A1	0.652716	9.375786	6.46082	5.78E-09	1.07E-06	10.27939
PIM1	-1.10133	8.501643	-6.4568	5.88E-09	1.07E-06	10.26224
PTN	0.915822	10.44843	6.426257	6.74E-09	1.21E-06	10.13191
PFKFB3	-0.89702	10.32822	-6.38406	8.14E-09	1.44E-06	9.952228
PPP1R15A	-0.80268	9.113151	-6.37899	8.32E-09	1.45E-06	9.930652
SEC31B	-0.75114	7.813639	-6.35952	9.08E-09	1.52E-06	9.847882
S100A8	1.354877	11.2211	6.313316	1.11E-08	1.83E-06	9.651863
FCER1A	0.985658	8.791551	6.311282	1.12E-08	1.83E-06	9.643247
IL1R1	-0.6213	10.17994	-6.29024	1.23E-08	1.98E-06	9.554131
SLC17A9	-0.74565	9.695911	-6.27809	1.30E-08	2.06E-06	9.502726
APEH	0.701511	8.752441	6.265048	1.38E-08	2.16E-06	9.447614

COL6A3	-0.68408	11.43647	-6.25783	1.42E-08	2.19E-06	9.417119
NCF1	0.898212	9.881338	6.241216	1.53E-08	2.31E-06	9.346973
PHACTR1	-0.7411	7.202359	-6.22199	1.67E-08	2.42E-06	9.265892
MAP2K7	-0.68138	7.140184	-6.21732	1.70E-08	2.42E-06	9.246214
NFIL3	-1.19958	10.3942	-6.18824	1.94E-08	2.68E-06	9.123775
CSF1R	0.859659	11.28413	6.146221	2.33E-08	3.16E-06	8.947208
NELL1	1.09975	8.266776	6.11192	2.71E-08	3.44E-06	8.803424
PTGS2	-1.26258	7.561532	-6.10607	2.78E-08	3.47E-06	8.77893
SLC19A2	-1.00559	7.746548	-6.10526	2.79E-08	3.47E-06	8.775526
CSF2RA	0.681626	8.538773	6.09503	2.91E-08	3.59E-06	8.73274
RAD54L	-0.60123	6.098409	-6.07677	3.16E-08	3.85E-06	8.65639
MCM3AP-	-0.74558	7.4547	-6.05548	3.46E-08	4.14E-06	8.567496
ARL4C	-0.85767	9.459374	-6.04823	3.58E-08	4.19E-06	8.537246
HPGDS	0.618427	9.942964	6.037011	3.76E-08	4.36E-06	8.490493
ZC3H7B	-0.84419	7.156197	-6.02114	4.02E-08	4.59E-06	8.42437
CRISPLD2	-0.98428	10.49457	-5.95402	5.39E-08	5.98E-06	8.145565
GABRB1	0.641715	9.194093	5.885554	7.25E-08	7.49E-06	7.862459
STMN2	1.020483	8.011944	5.862384	8.01E-08	8.08E-06	7.766956
SLC25A37	-0.73597	8.572932	-5.8024	1.04E-07	1.00E-05	7.520443
N6AMT1	0.708443	7.71084	5.785509	1.12E-07	1.05E-05	7.451223
FOSL1	-1.51492	7.104538	-5.78214	1.13E-07	1.05E-05	7.437423
NPL	0.618005	10.01731	5.78124	1.14E-07	1.05E-05	7.433742
TIPARP	-0.64257	9.505693	-5.7591	1.25E-07	1.14E-05	7.343186
LTC4S	0.910591	8.007092	5.703725	1.58E-07	1.37E-05	7.117293
ADORA3	0.615326	9.8922	5.681801	1.74E-07	1.48E-05	7.028128
PTBP2	-0.59083	8.110909	-5.66539	1.86E-07	1.56E-05	6.96147
TDO2	0.678203	8.52936	5.602362	2.44E-07	1.92E-05	6.706335
C1QB	0.740062	12.63989	5.587462	2.60E-07	2.03E-05	6.646204
CECR1	0.764755	9.663545	5.578884	2.69E-07	2.09E-05	6.611621
SYT17	0.751813	8.192801	5.573173	2.76E-07	2.12E-05	6.588611
RPE65	0.768392	4.231391	5.561724	2.89E-07	2.19E-05	6.542511
SLC2A3	-1.03167	8.271477	-5.52828	3.33E-07	2.48E-05	6.408094
RUFY2	-0.79519	8.028492	-5.51761	3.49E-07	2.53E-05	6.365298
SS18L1	-0.5907	7.348355	-5.50344	3.70E-07	2.61E-05	6.308526
GZMA	0.696105	7.27884	5.499634	3.76E-07	2.62E-05	6.293272
HOXD11	-0.68946	7.705326	-5.48174	4.05E-07	2.81E-05	6.221699
AASS	-0.69911	7.769448	-5.45918	4.46E-07	2.95E-05	6.131597
NPR3	0.633299	7.833305	5.452389	4.59E-07	2.99E-05	6.104501
PCDH12	0.703773	8.785614	5.420812	5.23E-07	3.36E-05	5.978766
MGAT4C	0.692565	7.062145	5.420722	5.24E-07	3.36E-05	5.978408
AIF1	0.603783	10.70018	5.414986	5.36E-07	3.39E-05	5.955604
DLEU2L	-0.74268	4.821825	-5.39127	5.92E-07	3.65E-05	5.861456
FAM155A	0.767929	8.739895	5.388039	6.00E-07	3.68E-05	5.848638
RTP4	0.807966	7.790635	5.377585	6.27E-07	3.80E-05	5.807212
IGLL5	1.053142	9.62625	5.348537	7.07E-07	4.15E-05	5.692303
RGS4	0.620612	8.763929	5.33055	7.62E-07	4.40E-05	5.621306
KCNK2	1.105522	7.712636	5.323312	7.85E-07	4.50E-05	5.592766
TREM2	0.962456	9.178594	5.31625	8.09E-07	4.61E-05	5.564944
CRB1	0.68914	7.084811	5.308901	8.34E-07	4.71E-05	5.536006
AMPH	-0.71141	7.374612	-5.29272	8.92E-07	4.90E-05	5.472351
FCF1	-0.89264	6.532173	-5.28133	9.34E-07	5.04E-05	5.427617
ANKRD36f	-0.68327	8.768291	-5.27053	9.77E-07	5.22E-05	5.385245
HYMAI	-0.65755	8.406802	-5.26973	9.80E-07	5.22E-05	5.382123
C1QA	0.71746	11.707	5.252168	1.05E-06	5.49E-05	5.313299
GPR56	-0.6049	8.506683	-5.2209	1.20E-06	6.14E-05	5.191075
ANKRD11	-0.74583	8.907295	-5.19662	1.32E-06	6.67E-05	5.096416
NKG7	0.935034	7.400854	5.194707	1.33E-06	6.67E-05	5.088966
LOC44160	0.716775	5.917178	5.189516	1.36E-06	6.79E-05	5.068763

SGCA	0.870942	8.45106	5.169576	1.48E-06	7.16E-05	4.991249
ZIC1	0.856536	10.47715	5.153775	1.58E-06	7.55E-05	4.929937
LDLR	-0.67228	8.115609	-5.13826	1.68E-06	8.01E-05	4.86984
POSTN	-1.14528	10.92701	-5.12297	1.79E-06	8.43E-05	4.810687
EPHA3	0.605047	7.337711	5.120355	1.81E-06	8.48E-05	4.800576
DDIT4	-0.94033	11.22517	-5.08303	2.10E-06	9.65E-05	4.656642
KLHL24	-0.66678	7.924677	-5.07921	2.14E-06	9.69E-05	4.641927
APOE	0.885045	11.45182	5.047194	2.43E-06	0.000108	4.51894
TMEM51	0.789168	10.10207	5.043067	2.47E-06	0.000109	4.503114
CYSLTR2	0.606889	7.490665	5.032873	2.58E-06	0.000112	4.464063
CXCL2	-1.04985	9.361804	-5.0157	2.76E-06	0.000119	4.398351
RRAD	-0.87565	8.152007	-4.98288	3.15E-06	0.000132	4.273147
EGLN3	-0.67688	7.906461	-4.96903	3.33E-06	0.000138	4.220434
MCOLN3	0.709936	8.167582	4.965201	3.39E-06	0.00014	4.205884
CCNL1	-0.61512	10.43872	-4.90483	4.31E-06	0.00017	3.97717
WIF1	1.625796	8.011187	4.902747	4.35E-06	0.000171	3.96931
SLC9A5	-0.61261	7.92536	-4.89601	4.47E-06	0.000173	3.943901
HLA-DQB1	0.596568	9.697417	4.892987	4.52E-06	0.000175	3.932493
SGCG	0.772184	7.157347	4.876829	4.82E-06	0.000184	3.871624
HLA-DQB1	0.847447	10.51857	4.869018	4.97E-06	0.000188	3.842238
DPEP2	0.757298	8.086365	4.863927	5.07E-06	0.00019	3.823102
DEFA4	0.658884	7.774015	4.849706	5.37E-06	0.0002	3.769702
CRIP1	0.704833	12.04988	4.838563	5.61E-06	0.000206	3.727921
CAMK2N1	-0.74978	9.799394	-4.83761	5.63E-06	0.000206	3.724352
INSIG1	-0.60821	9.076593	-4.8262	5.89E-06	0.000214	3.681615
HLA-DMB	0.8064	9.83506	4.824507	5.93E-06	0.000214	3.675298
SEMA3A	0.618486	7.139653	4.808263	6.33E-06	0.000224	3.614591
DPT	0.784379	12.73505	4.787732	6.86E-06	0.000238	3.538026
DUOX2	-1.08545	6.881782	-4.78588	6.91E-06	0.000239	3.531131
IL3RA	-0.70981	8.583353	-4.78539	6.92E-06	0.000239	3.529308
CLEC4A	0.590681	8.103441	4.763617	7.54E-06	0.000255	3.448337
STC1	-0.58518	8.220105	-4.76285	7.56E-06	0.000256	3.445476
TDRD12	-0.72323	5.892181	-4.7349	8.44E-06	0.000279	3.341865
LIF	-1.09355	8.905184	-4.7248	8.78E-06	0.000287	3.304518
GSDMB	-0.59262	7.246156	-4.72133	8.90E-06	0.00029	3.291703
CORO1A	0.633928	8.754339	4.719261	8.97E-06	0.000291	3.28405
SLC7A5	-0.84083	8.089016	-4.71046	9.29E-06	0.000295	3.251551
TAC1	1.072601	6.679003	4.705321	9.48E-06	0.000298	3.232603
PDZRN4	0.66049	7.401004	4.70498	9.49E-06	0.000298	3.231345
NFKB2	-0.69468	9.784641	-4.69286	9.95E-06	0.000308	3.186682
KAL1	0.928779	8.039381	4.692615	9.96E-06	0.000308	3.185785
CEBPA	0.655974	9.74507	4.682697	1.03E-05	0.000316	3.149293
TPSAB1	0.74298	10.16753	4.651363	1.17E-05	0.000349	3.034302
KLF9	-0.60996	9.186719	-4.64274	1.21E-05	0.000359	3.002748
IL1B	-0.58706	8.649215	-4.62614	1.29E-05	0.000372	2.942079
SLC18A2	0.751147	7.657897	4.623325	1.30E-05	0.000372	2.931794
C10orf10	-0.78926	10.22374	-4.58945	1.49E-05	0.000413	2.808426
ETS2	-0.78612	8.098063	-4.56275	1.65E-05	0.000448	2.711594
NPTX2	0.646367	8.598685	4.56104	1.66E-05	0.00045	2.705401
MT1M	-0.84321	11.00592	-4.48133	2.25E-05	0.000573	2.41839
AHR	0.599949	9.448822	4.478351	2.27E-05	0.000579	2.40772
ADM	-0.74277	12.22934	-4.45579	2.48E-05	0.00062	2.327086
IGJ	1.348294	8.99908	4.437444	2.65E-05	0.000653	2.261692
NID1	-0.61317	8.448261	-4.43151	2.71E-05	0.000662	2.240591
ATP8B1	-0.63143	8.325182	-4.40719	2.98E-05	0.000716	2.154214
DDX3Y	-1.2738	8.163133	-4.38695	3.21E-05	0.000768	2.082598
USP53	-0.74989	7.2936	-4.38525	3.23E-05	0.000771	2.076596
ANKH	0.74433	9.208053	4.360893	3.54E-05	0.000826	1.99067

CXCL8	-1.18505	6.15583	-4.34708	3.73E-05	0.000856	1.942086
TNFRSF10	-0.80575	7.919284	-4.34522	3.76E-05	0.000859	1.935549
CPA3	0.747666	8.424289	4.321152	4.11E-05	0.000914	1.851146
HOXA3	-0.58756	7.008757	-4.29437	4.54E-05	0.000982	1.757567
MXD1	-0.63929	6.649563	-4.2293	5.77E-05	0.0012	1.53179
ACADL	-0.7628	5.736016	-4.21891	6.00E-05	0.001226	1.495945
UBE2O	-0.66666	7.428625	-4.217	6.04E-05	0.001232	1.489379
WFDC1	0.614596	8.27627	4.207778	6.25E-05	0.001266	1.457619
NLGN4X	0.667552	7.929568	4.195624	6.54E-05	0.001307	1.415836
IFIT1	0.595864	9.267183	4.192179	6.62E-05	0.001319	1.404008
IER3	-0.71581	10.1442	-4.17084	7.16E-05	0.001381	1.33089
MTUS2	0.798344	7.270022	4.131841	8.25E-05	0.001524	1.19786
CXADR	0.714889	8.042645	4.129574	8.32E-05	0.001532	1.190154
MYOM2	0.645336	6.844435	4.109742	8.94E-05	0.001622	1.122856
IL6	-0.93357	8.753476	-4.10486	9.10E-05	0.001641	1.106328
TMEM100	0.590371	10.20614	4.092261	9.52E-05	0.001695	1.063711
HPCA	-0.77245	5.597555	-4.0865	9.72E-05	0.001715	1.044244
CYR61	-0.70303	10.6432	-4.07606	0.000101	0.001761	1.009039
APOD	-1.23874	9.604362	-4.06547	0.000105	0.001817	0.973414
MEST	0.70087	8.940668	4.058987	0.000107	0.001841	0.951607
EDNRB	-0.72499	10.77612	-4.04614	0.000112	0.001901	0.908471
SOCS5	-0.66039	7.653644	-4.03193	0.000118	0.001974	0.860888
SBNO2	-0.80816	9.167526	-4.02575	0.000121	0.002007	0.840235
PACS1	-0.60095	6.726848	-3.99581	0.000135	0.002166	0.740442
USP9Y	-0.96886	6.379092	-3.98214	0.000141	0.002247	0.695067
IFI44L	0.704842	8.378513	3.981293	0.000142	0.002248	0.692249
AVPR1A	-0.70114	6.078592	-3.95538	0.000155	0.002423	0.606505
CPE	0.71646	9.056313	3.947658	0.00016	0.002478	0.581032
HSD11B2	0.697342	7.133475	3.920404	0.000176	0.002701	0.491392
GADD45B	-0.80364	10.5045	-3.91997	0.000176	0.002701	0.489965
SLC35F5	-0.62831	8.394403	-3.90404	0.000186	0.002798	0.437775
MMP9	0.978565	11.16243	3.849527	0.000225	0.003219	0.260289
GOLIM4	-0.60919	6.181265	-3.83785	0.000235	0.003306	0.222505
IGLV1-44	0.821149	8.892012	3.822735	0.000247	0.003434	0.173701
SPON1	0.620203	9.078342	3.801563	0.000266	0.003608	0.105577
SLC16A7	-0.6187	7.182682	-3.78265	0.000284	0.003777	0.044936
TPPP3	0.659752	10.63552	3.782546	0.000284	0.003777	0.044617
ERAP2	0.655395	8.839206	3.775577	0.000291	0.00384	0.02233
IL11	-0.9305	7.110138	-3.76985	0.000297	0.00387	0.004036
CCL18	0.739527	8.797799	3.745153	0.000323	0.004092	-0.07462
SLC22A3	0.611929	6.605128	3.731575	0.000339	0.004223	-0.1177
NOV	0.593679	9.170315	3.714448	0.000359	0.00441	-0.17189
SIK1	-0.84617	10.01986	-3.70742	0.000368	0.004485	-0.19408
KIAA0754	-0.74142	6.2396	-3.66973	0.000418	0.004916	-0.31253
OLR1	0.723208	8.603343	3.667039	0.000422	0.004946	-0.32095
DPP4	-0.63476	8.161825	-3.65565	0.000438	0.005091	-0.35654
DNASE1L3	0.939461	8.323587	3.653276	0.000442	0.005123	-0.36396
APOLD1	-0.69356	9.579448	-3.63186	0.000475	0.005398	-0.43066
RHOH	0.619576	8.900388	3.619881	0.000494	0.005542	-0.46783
RND1	-0.68904	6.402187	-3.61024	0.000511	0.005703	-0.49769
S100A9	0.83843	9.229813	3.571132	0.000582	0.00633	-0.61822
BTC	0.588628	8.320194	3.54435	0.000636	0.006744	-0.70019
PENK	0.675284	9.03869	3.50051	0.000735	0.007494	-0.83339
FKBP5	-1.09897	6.31748	-3.46916	0.000814	0.008061	-0.92787
ANGPTL4	-0.78907	11.7056	-3.46636	0.000822	0.008108	-0.93628
GPR1	0.688316	6.645624	3.460654	0.000837	0.008242	-0.95341
HILPDA	-0.64153	11.5127	-3.44634	0.000877	0.008464	-0.99625
WNT5B	0.68475	8.744824	3.431006	0.000922	0.008778	-1.04202

SCRG1	0.888229	11.47628	3.361517	0.001153	0.010374	-1.24743
TXLNGY	-0.68099	6.345164	-3.34078	0.001232	0.010876	-1.3081
RNF19A	-0.64831	9.2766	-3.33562	0.001253	0.010985	-1.32318
ARC	-0.71535	7.205329	-3.3148	0.001338	0.011561	-1.38372
NUDT4	-0.6097	6.160784	-3.31208	0.00135	0.011612	-1.3916
MGC1248	-0.62008	8.309435	-3.30908	0.001363	0.011682	-1.40032
NPY1R	0.648716	6.357109	3.284431	0.001473	0.012317	-1.47153
NLGN4Y	-0.60729	7.218904	-3.24591	0.001663	0.013485	-1.58201
ATF3	-0.60405	9.844087	-3.24414	0.001672	0.013524	-1.58705
KDM5D	-0.98865	8.758711	-3.22487	0.001776	0.01406	-1.64193
HLA-DRB4	-1.11335	8.74834	-3.18371	0.002018	0.015449	-1.75825
TIMP4	-0.81572	8.337347	-3.17213	0.002091	0.015871	-1.79077
CCL20	-0.86853	6.368679	-3.16625	0.002129	0.016042	-1.80724
HBB	0.792862	10.92441	3.146156	0.002265	0.016702	-1.86337
LMNB1	-0.63903	6.948077	-3.09018	0.002686	0.019027	-2.01821
TLR8	0.612233	6.501908	3.052968	0.003006	0.020619	-2.11991
SERPINE1	-0.6871	9.188189	-3.0381	0.003143	0.021378	-2.16027
CRLF1	0.768935	11.49645	2.988555	0.003643	0.023735	-2.29362
FOXC2	-0.63384	6.491453	-2.9668	0.003885	0.024895	-2.35162
SLCO4A1	-0.5903	7.472972	-2.80125	0.006272	0.035174	-2.78153
RPS4Y1	-0.90691	10.84912	-2.76295	0.006989	0.037938	-2.87808
XIST	1.003308	9.213733	2.738974	0.007475	0.039658	-2.93797
EIF1AY	-0.65921	6.568882	-2.66168	0.009259	0.046384	-3.12801

Supplementary Table S4 Results of SVM and RF

SVM			RF	
FeatureNa	AvgRank		Gene	importance
1	TLR7	1.3	TLR7	10.68836
2	SLC25A37	1.9	IL1B	8.02711
3	IL1B	3.5	CRISPLD2	6.878275
4	CRISPLD2	3.7	SLC25A37	6.043948
5	MMP9	5.4	MMP9	4.702886
6	TLR8	5.8	IL6	3.54137
7	IL6	6.4	TLR8	1.589664

Supplementary Table S5 DE-NRGs targeted drugs

gene	drug	interaction_types
TLR7	HYDROXYCHLOROQUINE	antagonist
TLR7	CHLOROQUINE	
TLR7	HYDROXYCHLOROQUINE SULFATE	antagonist
TLR7	IMIQUIMOD	agonist
CRISPLD2	DEXAMETHASONE	
IL1B	ACITRETIN	
IL1B	CEFACLOR	
IL1B	ERYTHROMYCIN	
IL1B	THYROGLOBULIN	
IL1B	LANSOPRAZOLE	
IL1B	PENTAMIDINE	
IL1B	OFLOXACIN	
IL1B	ALTEPLASE	
IL1B	TILUDRONIC ACID	
IL1B	OMEPRAZOLE	
IL1B	PENTOXIFYLLINE	
IL1B	USTEKINUMAB	
IL1B	GLUCOSAMINE	
IL1B	PRAVASTATIN	
IL1B	HYDROQUINONE	
IL1B	RISEDRONIC ACID	
IL1B	MORPHINE	
IL1B	MELATONIN	
IL1B	RABEPRAZOLE	
IL1B	RILONACEPT	binder inhibitor
IL1B	CANAKINUMAB	binder antibody inhibitor
IL1B	RALOXIFENE	
IL1B	VERAPAMIL	
IL1B	DIACEREIN	
IL1B	ASPIRIN	
IL1B	NICARDIPINE	
IL1B	HYDROCORTISONE	
IL1B	INFLIXIMAB	
MMP9	BEVACIZUMAB	