

Table S2 Immune-related mRNAs

SYMBOL	ENSEMBL
<i>A2M</i>	ENSG00000175899
<i>ACTA1</i>	ENSG00000143632
<i>AGTR1</i>	ENSG00000144891
<i>AIMP1</i>	ENSG00000164022
<i>AKT3</i>	ENSG00000117020
<i>AKT3</i>	ENSG00000117020
<i>AMHR2</i>	ENSG00000135409
<i>AMHR2</i>	ENSG00000135409
<i>APOM</i>	ENSG00000204444
<i>BIRC5</i>	ENSG00000089685
<i>BPIFB1</i>	ENSG00000125999
<i>BPIFB3</i>	ENSG00000186190
<i>BPIFB4</i>	ENSG00000186191
<i>BPIFC</i>	ENSG00000184459
<i>BRD8</i>	ENSG00000112983
<i>C3</i>	ENSG00000125730
<i>C3</i>	ENSG00000125730
<i>CAT</i>	ENSG00000121691
<i>CBL</i>	ENSG00000110395
<i>CCL21</i>	ENSG00000137077
<i>CCL21</i>	ENSG00000137077
<i>CCL21</i>	ENSG00000137077
<i>CCR7</i>	ENSG00000126353
<i>CCR7</i>	ENSG00000126353
<i>CCR7</i>	ENSG00000126353
<i>CD209</i>	ENSG00000090659
<i>CD8A</i>	ENSG00000153563
<i>CD8A</i>	ENSG00000153563
<i>CD8A</i>	ENSG00000153563
<i>CD8B</i>	ENSG00000172116
<i>CD8B</i>	ENSG00000172116
<i>CHGB</i>	ENSG00000089199
<i>CHUK</i>	ENSG00000213341
<i>CHUK</i>	ENSG00000213341
<i>CMTM5</i>	ENSG00000166091
<i>CRHR2</i>	ENSG00000106113
<i>CRLF3</i>	ENSG00000176390
<i>CSF1R</i>	ENSG00000182578
<i>ELAVL1</i>	ENSG00000066044
<i>F2R</i>	ENSG00000181104
<i>FGF1</i>	ENSG00000113578
<i>FGFR3</i>	ENSG00000068078
<i>FLT4</i>	ENSG00000037280
<i>FYN</i>	ENSG00000010810
<i>FYN</i>	ENSG00000010810
<i>GALP</i>	ENSG00000197487
<i>GHRHR</i>	ENSG00000106128
<i>GIPR</i>	ENSG00000010310
<i>GLP1R</i>	ENSG00000112164
<i>GMFG</i>	ENSG00000130755
<i>GZMB</i>	ENSG00000100453

<i>HLA-DMB</i>	ENSG00000242574
<i>HLA-DOB</i>	ENSG00000241106
<i>HNF4A</i>	ENSG00000101076
<i>HSPA2</i>	ENSG00000126803
<i>HTR3C</i>	ENSG00000178084
<i>IFIH1</i>	ENSG00000115267
<i>IFITM1</i>	ENSG00000185885
<i>IGHG2</i>	ENSG00000211893
<i>IGKC</i>	ENSG00000211592
<i>IL10</i>	ENSG00000136634
<i>IL10</i>	ENSG00000136634
<i>IL10</i>	ENSG00000136634
<i>IL11RA</i>	ENSG00000137070
<i>IL11RA</i>	ENSG00000137070
<i>IL16</i>	ENSG00000172349
<i>IL16</i>	ENSG00000172349
<i>IL17D</i>	ENSG00000172458
<i>IL17D</i>	ENSG00000172458
<i>IL17RB</i>	ENSG00000056736
<i>IL17RB</i>	ENSG00000056736
<i>IL18RAP</i>	ENSG00000115607
<i>IL18RAP</i>	ENSG00000115607
<i>IL22RA1</i>	ENSG00000142677
<i>IL22RA1</i>	ENSG00000142677
<i>IL24</i>	ENSG00000162892
<i>IL24</i>	ENSG00000162892
<i>IL6R</i>	ENSG00000160712
<i>IL6R</i>	ENSG00000160712
<i>IL7R</i>	ENSG00000168685
<i>IL7R</i>	ENSG00000168685
<i>IL7R</i>	ENSG00000168685
<i>IRF1</i>	ENSG00000125347
<i>IRF7</i>	ENSG00000185507
<i>ITGB2</i>	ENSG00000160255
<i>ITK</i>	ENSG00000113263
<i>JAG2</i>	ENSG00000184916
<i>KL</i>	ENSG00000133116
<i>LGR6</i>	ENSG00000133067
<i>MICB</i>	ENSG00000204516
<i>MICB</i>	ENSG00000204516
<i>MPO</i>	ENSG00000005381
<i>MR1</i>	ENSG00000153029
<i>MUC4</i>	ENSG00000145113
<i>NCR3</i>	ENSG00000204475
<i>NFYC</i>	ENSG00000066136
<i>NLRX1</i>	ENSG00000160703
<i>NR1D2</i>	ENSG00000174738
<i>NR1H2</i>	ENSG00000131408
<i>NRG4</i>	ENSG00000169752
<i>OAS1</i>	ENSG00000089127
<i>OASL</i>	ENSG00000135114
<i>OSGIN1</i>	ENSG00000140961
<i>PAEP</i>	ENSG00000122133

<i>PAK1</i>	ENSG00000149269
<i>PAK1</i>	ENSG00000149269
<i>PAK2</i>	ENSG00000180370
<i>PDK1</i>	ENSG00000152256
<i>PGLYRP4</i>	ENSG00000163218
<i>PLXNA2</i>	ENSG00000076356
<i>PLXNA2</i>	ENSG00000076356
<i>PLXNC1</i>	ENSG00000136040
<i>PLXNC1</i>	ENSG00000136040
<i>PPBP</i>	ENSG00000163736
<i>PPBP</i>	ENSG00000163736
<i>PPBP</i>	ENSG00000163736
<i>PPIA</i>	ENSG00000196262
<i>PRLHR</i>	ENSG00000119973
<i>PTGFR</i>	ENSG00000122420
<i>PTK2B</i>	ENSG00000120899
<i>PTK2B</i>	ENSG00000120899
<i>RABEP2</i>	ENSG00000177548
<i>RARA</i>	ENSG00000131759
<i>RASGRP3</i>	ENSG00000152689
<i>RHOA</i>	ENSG00000067560
<i>SI00A1</i>	ENSG00000160678
<i>SI00A14</i>	ENSG00000189334
<i>SEMA3G</i>	ENSG00000010319
<i>SEMA3G</i>	ENSG00000010319
<i>SEMA4B</i>	ENSG00000185033
<i>SEMA4B</i>	ENSG00000185033
<i>SEMA4C</i>	ENSG00000168758
<i>SEMA4C</i>	ENSG00000168758
<i>SHC2</i>	ENSG00000129946
<i>SKIV2L</i>	ENSG00000204351
<i>SLIT1</i>	ENSG00000187122
<i>SLIT1</i>	ENSG00000187122
<i>SORT1</i>	ENSG00000134243
<i>SP1</i>	ENSG00000185591
<i>SSTR2</i>	ENSG00000180616
<i>STC2</i>	ENSG00000113739
<i>TEK</i>	ENSG00000120156
<i>TGFA</i>	ENSG00000163235
<i>TGFBR1</i>	ENSG00000106799
<i>TGFBR1</i>	ENSG00000106799
<i>TGFBR2</i>	ENSG00000163513
<i>TGFBR2</i>	ENSG00000163513
<i>TIE1</i>	ENSG00000066056
<i>TNFRSF12A</i>	ENSG00000006327
<i>TNFRSF12A</i>	ENSG00000006327
<i>TNFRSF17</i>	ENSG00000048462
<i>TNFRSF17</i>	ENSG00000048462
<i>TPM2</i>	ENSG00000198467
<i>TRAV12-3</i>	ENSG00000211794
<i>TSLP</i>	ENSG00000145777
<i>TXLNA</i>	ENSG00000084652
<i>TXLNA</i>	ENSG00000084652

<i>UBR1</i>	ENSG00000159459
<i>VCAM1</i>	ENSG00000162692
<i>WFIKKN1</i>	ENSG00000127578
<i>ZC3HAV1</i>	ENSG00000105939

Table S3 Immune-related lncRNAs

SYMBOL	ENSEMBL
<i>LINC01409</i>	ENSG00000237491
<i>AC117945.1</i>	ENSG00000234481
<i>MYCL-AS1</i>	ENSG00000236546
<i>AL355483.1</i>	ENSG00000228838
<i>AC099063.4</i>	ENSG00000284734
<i>LINC01750</i>	ENSG00000231437
<i>AL049825.1</i>	ENSG00000285698
<i>FP700111.1</i>	ENSG00000224363
<i>UBE2Q1-AS1</i>	ENSG00000229780
<i>AL365181.2</i>	ENSG00000272068
<i>AL590666.2</i>	ENSG00000229953
<i>AL139011.1</i>	ENSG00000228606
<i>AL356441.1</i>	ENSG00000236206
<i>LINC00862</i>	ENSG00000203721
<i>LINC01460</i>	ENSG00000205334
<i>AL133243.3</i>	ENSG00000276517
<i>MAP4K3-DT</i>	ENSG00000231312
<i>AC016727.1</i>	ENSG00000270820
<i>AC016727.3</i>	ENSG00000285857
<i>AC018462.1</i>	ENSG00000229839
<i>AC007277.1</i>	ENSG00000213981
<i>AC007405.3</i>	ENSG00000235934
<i>SGO1-AS1</i>	ENSG00000231304
<i>AC006059.5</i>	ENSG00000287629
<i>KIF9-AS1</i>	ENSG00000227398
<i>SEMA3F-AS1</i>	ENSG00000235016
<i>GLYCTK-AS1</i>	ENSG00000242797
<i>AC007126.1</i>	ENSG00000250497
<i>KLF3-AS1</i>	ENSG00000231160
<i>AC097478.4</i>	ENSG00000288563
<i>H2AZ1-DT</i>	ENSG00000245322
<i>SCOC-AS1</i>	ENSG00000196951
<i>AC079768.2</i>	ENSG00000287298
<i>AC011407.1</i>	ENSG00000287814
<i>LINC01951</i>	ENSG00000204754
<i>ZSCAN16-AS1</i>	ENSG00000269293
<i>LINC02536</i>	ENSG00000281248
<i>AL592429.2</i>	ENSG00000226571
<i>AL358852.1</i>	ENSG00000278899
<i>NANOGP11</i>	ENSG00000233464
<i>AL606970.1</i>	ENSG00000224417
<i>AL109924.4</i>	ENSG00000285917
<i>AL109924.2</i>	ENSG00000234519
<i>SNHG26</i>	ENSG00000228649
<i>AC093582.1</i>	ENSG00000236529

<i>LINC00174</i>	ENSG00000179406
<i>AC002451.1</i>	ENSG00000231170
<i>AC010973.2</i>	ENSG00000244151
<i>PRKAG2-AS1</i>	ENSG00000239911
<i>AC022239.2</i>	ENSG00000286985
<i>AC079193.2</i>	ENSG00000249258
<i>AP006248.4</i>	ENSG00000279932
<i>AC027117.1</i>	ENSG00000253671
<i>AC100802.1</i>	ENSG00000253775
<i>AC015687.1</i>	ENSG00000285579
<i>AL360020.1</i>	ENSG00000286834
<i>LINC00702</i>	ENSG00000233117
<i>AL353576.1</i>	ENSG00000287925
<i>STAM-AS1</i>	ENSG00000260589
<i>NUTM2B-AS1</i>	ENSG00000225484
<i>ENTPD1-AS1</i>	ENSG00000226688
<i>AC023282.1</i>	ENSG00000274461
<i>WDR11-AS1</i>	ENSG00000227165
<i>LINC00958</i>	ENSG00000251381
<i>AC104009.1</i>	ENSG00000254768
<i>LRP4-AS1</i>	ENSG00000247675
<i>AP002336.2</i>	ENSG00000254604
<i>AC004803.1</i>	ENSG00000250132
<i>AC008124.1</i>	ENSG00000273015
<i>AC148477.4</i>	ENSG00000277011
<i>AL442125.1</i>	ENSG00000276248
<i>LINC00452</i>	ENSG00000229373
<i>AL136419.2</i>	ENSG00000285727
<i>AL137230.2</i>	ENSG00000258792
<i>LINC00605</i>	ENSG00000251533
<i>AC090510.4</i>	ENSG00000286877
<i>AC025271.4</i>	ENSG00000276772
<i>AC103739.3</i>	ENSG00000285560
<i>AL032819.1</i>	ENSG00000260132
<i>LINC01569</i>	ENSG00000262468
<i>AC138811.1</i>	ENSG00000260017
<i>AC138028.6</i>	ENSG00000278341
<i>AC026254.2</i>	ENSG00000266313
<i>AC022903.2</i>	ENSG00000285559
<i>NBR2</i>	ENSG00000198496
<i>AC007114.2</i>	ENSG00000263089
<i>AC015813.1</i>	ENSG00000264112
<i>AC007922.3</i>	ENSG00000265094
<i>AC005776.2</i>	ENSG00000273218
<i>AC011483.1</i>	ENSG00000267879
<i>AC006115.2</i>	ENSG00000286125
<i>A1BG-AS1</i>	ENSG00000268895
<i>SLCO4A1-AS1</i>	ENSG00000232803
<i>BX322562.1</i>	ENSG00000273796
<i>AL022318.5</i>	ENSG00000288106
<i>AL096840.3</i>	ENSG00000287384
<i>AL445253.1</i>	ENSG00000285873
<i>LINC02574</i>	ENSG00000233975

<i>LINC01788</i>	ENSG00000229051
<i>AL513285.1</i>	ENSG00000226208
<i>AL121987.1</i>	ENSG00000225279
<i>AL353593.2</i>	ENSG00000270110
<i>AC074117.1</i>	ENSG00000234072
<i>AC069404.1</i>	ENSG00000287435
<i>C3orf35</i>	ENSG00000198590
<i>Z84492.1</i>	ENSG00000271858
<i>FAM153CP</i>	ENSG00000204677
<i>HCG25</i>	ENSG00000232940
<i>LINC00513</i>	ENSG00000233559
<i>AF235103.1</i>	ENSG00000255164
<i>ZNF252P-AS1</i>	ENSG00000255559
<i>PITRM1-AS1</i>	ENSG00000237399
<i>AL391684.1</i>	ENSG00000224934
<i>KCNQ1DN</i>	ENSG00000237941
<i>AP003721.2</i>	ENSG00000256733
<i>AP003068.2</i>	ENSG00000254614
<i>AP003498.1</i>	ENSG00000248671
<i>LINC00368</i>	ENSG00000225870
<i>PWRN4</i>	ENSG00000260232
<i>AC093525.7</i>	ENSG00000269937
<i>AC093525.4</i>	ENSG00000261140
<i>AC108134.3</i>	ENSG00000262370
<i>AC135050.6</i>	ENSG00000278133
<i>AC087164.1</i>	ENSG00000266677
<i>CCDC144NL-AS1</i>	ENSG00000233098
<i>AC099811.3</i>	ENSG00000267658
<i>HOXB-AS2</i>	ENSG00000239552
<i>AC087741.1</i>	ENSG00000262580
<i>AC008764.2</i>	ENSG00000268087
<i>LIPE-AS1</i>	ENSG00000213904
<i>AC021092.1</i>	ENSG00000186019
<i>AC016629.2</i>	ENSG00000269600
<i>AL035071.1</i>	ENSG00000260257
<i>AL499627.1</i>	ENSG00000260542
<i>AL357033.1</i>	ENSG00000167046
<i>LINC01651</i>	ENSG00000279920
<i>EFCAB6-AS1</i>	ENSG00000223843

Table S5 GSE116250 sample information

Group	GEO Accession	Organism	Platform ID	Disease state	Tissue
NF1	GSM3219558	Homo sapiens	GPL16791	Non-failing	heart
NF2	GSM3219565	Homo sapiens	GPL16791	Non-failing	heart
NF3	GSM3219566	Homo sapiens	GPL16791	Non-failing	heart
NF4	GSM3219567	Homo sapiens	GPL16791	Non-failing	heart
NF5	GSM3219568	Homo sapiens	GPL16791	Non-failing	heart
NF6	GSM3219569	Homo sapiens	GPL16791	Non-failing	heart
NF7	GSM3219570	Homo sapiens	GPL16791	Non-failing	heart
NF8	GSM3219571	Homo sapiens	GPL16791	Non-failing	heart
NF9	GSM3219559	Homo sapiens	GPL16791	Non-failing	heart
NF10	GSM3219560	Homo sapiens	GPL16791	Non-failing	heart
NF11	GSM3219561	Homo sapiens	GPL16791	Non-failing	heart

NF12	GSM3219562	Homo sapiens	GPL16791	Non-failing	heart
NF13	GSM3219563	Homo sapiens	GPL16791	Non-failing	heart
NF14	GSM3219564	Homo sapiens	GPL16791	Non-failing	heart
ICM1	GSM3219609	Homo sapiens	GPL16791	ischemic	heart
ICM2	GSM3219610	Homo sapiens	GPL16791	ischemic	heart
ICM3	GSM3219611	Homo sapiens	GPL16791	ischemic	heart
ICM4	GSM3219612	Homo sapiens	GPL16791	ischemic	heart
ICM5	GSM3219613	Homo sapiens	GPL16791	ischemic	heart
ICM6	GSM3219614	Homo sapiens	GPL16791	ischemic	heart
ICM7	GSM3219615	Homo sapiens	GPL16791	ischemic	heart
ICM8	GSM3219616	Homo sapiens	GPL16791	ischemic	heart
ICM9	GSM3219617	Homo sapiens	GPL16791	ischemic	heart
ICM10	GSM3219618	Homo sapiens	GPL16791	ischemic	heart
ICM11	GSM3219619	Homo sapiens	GPL16791	ischemic	heart
ICM12	GSM3219620	Homo sapiens	GPL16791	ischemic	heart
ICM13	GSM3219621	Homo sapiens	GPL16791	ischemic	heart

Table S6 GSE46224 sample information

Group	GEO Accession	Organism	Platform ID	Disease state	Tissue
NF1	GSM1126612	Homo sapiens	GPL11154	Non-failing	heart
NF2	GSM1126613	Homo sapiens	GPL11154	Non-failing	heart
NF3	GSM1126614	Homo sapiens	GPL11154	Non-failing	heart
NF4	GSM1126615	Homo sapiens	GPL11154	Non-failing	heart
NF5	GSM1126616	Homo sapiens	GPL11154	Non-failing	heart
NF6	GSM1126617	Homo sapiens	GPL11154	Non-failing	heart
NF7	GSM1126618	Homo sapiens	GPL11154	Non-failing	heart
NF8	GSM1126619	Homo sapiens	GPL11154	Non-failing	heart
ICM1	GSM1126620	Homo sapiens	GPL11154	ischemic	heart
ICM2	GSM1126621	Homo sapiens	GPL11154	ischemic	heart
ICM3	GSM1126622	Homo sapiens	GPL11154	ischemic	heart
ICM4	GSM1126623	Homo sapiens	GPL11154	ischemic	heart
ICM5	GSM1126624	Homo sapiens	GPL11154	ischemic	heart
ICM6	GSM1126625	Homo sapiens	GPL11154	ischemic	heart
ICM7	GSM1126626	Homo sapiens	GPL11154	ischemic	heart
ICM8	GSM1126627	Homo sapiens	GPL11154	ischemic	heart

Table S7 Primer information

Gene	Forward	Reverse
<i>LINC00452</i>	5'-GTTGGTTCAGTGGGGGCTAT-3'	5'-GACAGGCTTGTAACGGAGGT-3'
<i>AC011483.1</i>	5'-CAGAACTACGTCCACTGGTCC-3'	5'-GCCACATCCACGCCATGTT-3'
<i>CCR7</i>	5'-TGAGGTCACGGACGATTACAT-3'	5'-GTAGGCCCCACGAAACAAATGAT-3'
<i>IL17RB</i>	5'-ATGTCGCTCGTGCTGCTAAG-3'	5'AGCCACATTGAACGGTCGG-3'
<i>MICB</i>	5'-TCTTCGTTACAACCTCATGGTG-3'	5'-TGGCTCGCAGTTTGAGGAAT-3'