

Table S1 Identification of robust DEGs by log-rank test

Genes	P value
Up-regulated genes	
LEFTY1	0.0005
TAS2R10	0.0007
SAMSN1-AS1	0.0008
LINC02657	0.0015
COL22A1	0.0019
SNORD111	0.0023
ARSE	0.0026
XPO5	0.0027
HIST1H3B	0.0028
LINC01123	0.0029
MMP20	0.0034
LOC102723385	0.0035
ACTBL2	0.0039
DDN	0.0041
STEAP2-AS1	0.0042
LOC102725072	0.0043
RBAKDN	0.0044
PSG9	0.0054
LOC286059	0.0069
PTTG3P	0.0071
RAD54B	0.0073
ORC6	0.0073
HIST1H2AJ	0.0077
PLXNA1	0.0078
NOP56	0.0079
LOC101929470	0.0080
SLC22A14	0.0083
TLR2	0.0088
TMEM212	0.0098
RGSL1	0.0103
LACTB2	0.0105
LINC02022	0.0107
MIR663AHG	0.0109
MIR4753	0.0125
KRT40	0.0128
OVOL3	0.0128
PRR5L	0.0131
EVA1A	0.0137
LOC105373764	0.0146
CCNYL2	0.0148
CSH2	0.0152
TPBGL	0.0156
OR8G5	0.0157
CTAG2	0.0158
MINAR2	0.0159
ACRV1	0.0159
CCR8	0.0162
CLDN9	0.0165
PCNA	0.0173
TMEM145	0.0173
MGC32805	0.0174
PNMA2	0.0175
UNC13A	0.0177
LINC01675	0.0177
PTPRU	0.0180
LINC02052	0.0181
GDPD5	0.0194
TTPA	0.0194
CCL26	0.0196
IL37	0.0199
FOXO2-AS1	0.0203
LINC02506	0.0204
SOX4	0.0210
VAC14-AS1	0.0211
HIST1H2AH	0.0211
BPIFB4	0.0211
MIR181A2HG	0.0211
LINC01205	0.0212
HSPE1-MOB4	0.0219
KIAA2012	0.0226
MIR647	0.0228
PRR5-ARHGAP8	0.0236
HIST1H2BO	0.0241
DIAPH3	0.0245
SYCP2L	0.0245
FLJ33534	0.0246
MUC4	0.0247
SGO1	0.0252
TBC1D3P5	0.0256
C6orf99	0.0264
CNGB3	0.0266
CPLX4	0.0268
PARPBP	0.0268
SSX2	0.0270
HOXA10	0.0279
ZAN	0.0280
ZNF724	0.0303
OR12D3	0.0303
LINC00456	0.0305
ADCY10	0.0306
LHX9	0.0309
STAM-AS1	0.0316
TXNDC12-AS1	0.0320
LRRC37A6P	0.0322
CLCN4	0.0323
SCN2A	0.0327
IL18BP	0.0331
ATP11AUN	0.0331
MIR5194	0.0336
LINC00939	0.0337
HOXC6	0.0340
SAGE1	0.0343
FIRRE	0.0347
CXCL9	0.0349
EGF	0.0353
SUV39H2	0.0366
LINC01419	0.0368
LINC01299	0.0385
SCARNA13	0.0388
CCDC34	0.0394
LOC101928708	0.0396
HAR1B	0.0405
LOC100131496	0.0408
HIST3H3	0.0409
SMIM23	0.0410
ALKAL1	0.0411
MFAP2	0.0413
NME1	0.0415
OR8D1	0.0418
OSMR	0.0418
LINC02119	0.0421
HIST2H2BF	0.0428
LINC01285	0.0432
SLC38A4	0.0433
LIF-AS1	0.0439
COL1A1	0.0441
EMBP1	0.0450
MOGAT1	0.0454
CYMP	0.0455
CFHR4	0.0467
IFNE	0.0467
SNORD92	0.0472
OIP5	0.0474
HOXC-AS1	0.0477
LIF	0.0478
VCAN-AS1	0.0488
LACTB2-AS1	0.0493
NETO2	0.0495
LOC105375679	0.0497
STPG3	0.0499
Down-regulated genes	
SNORD9	0.0001
SULT2A1	0.0008
LOC105369748	0.0011
DAB1	0.0028
MSTN	0.0031
KLF4	0.0034
CC2D2A	0.0049
APOBEC1	0.0050
FOLR2	0.0058
NR3C2	0.0058
BCKDHA	0.0062
P3H2	0.0063
TEX26	0.0073
C17orf78	0.0081
MAB21L3	0.0092
MALL	0.0095
ATP5PF	0.0097
CTSF	0.0110
LOC101928881	0.0110
SHISAL2B	0.0111
LINC01354	0.0115
AQP11	0.0118
SMDT1	0.0123
PADI1	0.0127
IL6	0.0133
LOH12CR2	0.0140
PLIN1	0.0151
PLA2G4D	0.0151
B3GAT1	0.0154
PER1	0.0155
PXMP2	0.0167
SKIDA1	0.0168
DUSP1	0.0170
KCND3	0.0170
SMLR1	0.0175
UGT1A4	0.0176
EPB41L3	0.0181
FAM189A2	0.0186
CSTB	0.0191
B3GNT8	0.0206
EGR3	0.0208
RDH5	0.0213
IGFBP6	0.0213
NR0B1	0.0215
LMO3	0.0249
CHST15	0.0260
PHF21B	0.0260
ANKRD63	0.0270
SOAT2	0.0270
PPP2R2C	0.0273
C5orf67	0.0275
LAMB4	0.0276
ARHGEF37	0.0278
KCNJ13	0.0280
MIR1-1HG	0.0284
PER3	0.0288
FNDC4	0.0291
NR0B2	0.0292
BPIFB1	0.0295
GABRA5	0.0296
HRH2	0.0300
CFD	0.0301
SCARA5	0.0306
ACSM6	0.0314
TXNIP	0.0315
CAPN13	0.0325
KLF15	0.0326
TOM1L2	0.0377
ATRNL1	0.0383
GNG7	0.0386
PRAMENP	0.0388
ITGB7	0.0394
TFAP2B	0.0400
ABCG5	0.0400
TIAM1	0.0410
ATP13A5	0.0410
ACOT12	0.0413
MIR215	0.0425
EMILIN3	0.0433
LRRC3B	0.0434
FADS6	0.0439
TP53I3	0.0444
IRX4	0.0447
CCL25	0.0447
DHRS1	0.0448
STOX2	0.0450
ANKRD65	0.0450
PRELP	0.0454
NPY	0.0455
UGT1A10	0.0458
MYOM2	0.0465
LINC01797	0.0469
TMEM236	0.0471
REEP6	0.0471
IL16	0.0475
GRIK3	0.0494
LINC00882	0.0494
NR4A3	0.0496