Table S3 The full list of DEGs in ESCC

Gene symbol	Log_2FC	P value	FDR
Up-regulated genes			
CST1	5.956029	1.09^{-11}	6.02^{-10}
HOXC10	5.386963	2.13^{-16}	2.55^{-14}
IGF2BP3	5.023851	3.07^{-13}	2.22^{-11}
MMP3	5.021315	7.96^{-11}	3.71^{-9}
MMP12	4.913275	1.23^{-14}	1.10^{-12}
MMP1	4.741696	9.56^{-12}	5.35^{-10}
HOXA10	4.568733	9.38^{-18}	1.43^{-15}
CCL20	4.542157	3.39^{-10}	1.38^{-8}
HOXC11	4.540655	1.35^{-15}	1.36^{-13}
IL8	4.538048	1.90^{-13}	1.42^{-11}
HOXA13	4.535537	4.69^{-8}	1.06^{-6}
TNS4	4.48872	4.85^{-8}	1.09^{-6}
CXCL1	4.379724	9.70^{-12}	5.41^{-10}
SERPINB5	4.309896	9.41^{-10}	3.44^{-8}
MMP10	4.298934	8.57^{-8}	1.80^{-6}
CLDN7	4.179345	1.29^{-15}	1.32^{-13}
HOXC8	4.160176	3.79^{-19}	6.70^{-17}
ULBP2	4.156556	5.87^{-14}	4.76^{-12}
HOXC9	4.129195	2.06^{-20}	4.65^{-18}
GRIN2D	4.103299	7.27^{-12}	4.19^{-10}
MMP11	4.092021	4.21^{-10}	1.68^{-8}
PCSK9	4.004563	1.15^{-10}	5.24^{-9}
HOXA11	3.987797	7.96^{-10}	2.95^{-8}
STRA6	3.982634	7.55^{-9}	2.19^{-7}
CDH3	3.953851	8.61^{-11}	3.99^{-9}
IBSP	3.923011	6.97^{-12}	4.04^{-10}
NEK2	3.854905	4.29^{-30}	4.41^{-26}
TDO2	3.843534	6.37^{-14}	5.15^{-12}
HOXB7	3.783269	2.32^{-18}	3.75^{-16}
UBE2C	3.772499	1.68^{-28}	5.08^{-25}
MYBL2	3.759663	9.98^{-24}	4.66^{-21}
CDC45	3.739517	7.40^{-25}	5.24^{-22}
CLDN4	3.665586	1.47^{-10}	6.56^{-9}
DLGAP5	3.660854	2.55^{-27}	4.76^{-24}
CXCL6	3.660179	4.77^{-8}	1.07^{-6}
BUB1	3.634213	1.80^{-28}	5.08^{-25}
AURKB	3.630878	4.58^{-23}	1.65^{-20}
APOC2	3.624933	2.20^{-10}	9.49^{-9}
NUF2	3.623693	3.21^{-25}	2.75^{-22}
TPX2	3.609144	1.77^{-30}	3.63^{-26}
KIF14	3.600602	4.97^{-25}	3.78^{-22}
MCM10	3.596431	2.03^{-23}	8.48^{-21}

Table S3 *(continued)*

Gene symbol	Log_2FC	P value	FDR
ASB11	–4.0185	1.98^{-28}	5.08^{-25}
MT1M	–3.96358	4.85^{-10}	1.89^{-8}
CLCNKA	–3.95565	6.83^{-16}	7.41^{-14}
ACADL	–3.94341	5.10^{-12}	3.10^{-10}
VIP	–3.93662	1.25^{-11}	6.83^{-10}
CNTN3	–3.9298	1.37^{-11}	7.40^{-10}
FXYD1	–3.89477	1.28^{-11}	6.97^{-10}
HSPB6	–3.8913	1.13^{-9}	4.04^{-8}
ESRRB	–3.8783	1.49^{-17}	2.15^{-15}
PTGER3	–3.86306	3.00^{-10}	1.24^{-8}
SLC1A2	–3.84992	2.95^{-12}	1.85^{-10}
SULT2A1	–3.83839	4.19^{-8}	9.63^{-7}
RANBP3L	–3.83287	5.22^{-9}	3.13^{-10}
ENAM	–3.81347	2.74^{-9}	1.74^{-10}
MAMDC2	–3.79894	1.13^{-8}	3.10^{-7}
ADIPOQ	–3.79027	7.49^{-16}	8.05^{-14}
PGM5	–3.78587	2.02^{-7}	3.87^{-6}
ERBB4	–3.78514	1.19^{-11}	6.52^{-10}
HS6ST3	–3.77853	1.62^{-8}	4.24^{-7}
OGN	–3.76222	1.23^{-7}	2.47^{-6}
WISP2	–3.75604	2.95^{-7}	5.36^{-6}
HTR1E	–3.74057	5.24^{-28}	1.08^{-24}
SNORD116-4	–3.72865	2.46^{-7}	4.59^{-6}
C1orf95	–3.72437	1.42^{-8}	3.77^{-7}
GFRA1	–3.71141	8.15^{-8}	1.72^{-6}
HSPB7	–3.70142	6.89^{-8}	1.48^{-6}
SYT4	–3.69787	2.62^{-16}	3.07^{-14}
ASPA	–3.694	1.06^{-13}	8.21^{-12}
CFC1B	–3.68673	2.35^{-15}	2.30^{-13}
MYO18B	–3.68416	1.74^{-7}	3.39^{-6}
RELN	–3.68194	1.20^{-7}	2.42^{-6}
PCDH9	–3.67589	4.58^{-8}	1.04^{-6}
SLC2A4	–3.66599	2.79^{-10}	1.17^{-8}
RYR2	–3.65764	1.17^{-7}	2.37^{-6}
ITGA8	–3.64352	2.52^{-7}	4.67^{-6}
EPHA5	–3.6427	6.87^{-15}	6.35^{-13}
PKHD1L1	–3.64098	1.79^{-10}	7.90^{-9}
KCTD8	–3.63123	2.52^{-15}	2.45^{-13}
SLC26A7	–3.62271	4.49^{-9}	1.39^{-7}
PTPRN	–3.62	4.24^{-7}	7.31^{-6}
SYNPO2	–3.61932	2.31^{-7}	4.35^{-6}
SCG3	–3.615	9.22^{-9}	2.61^{-7}
RBPMS2	–3.59944	4.22^{-12}	2.59^{-10}

CCNB2	3.585306	2.83^{-23}	1.06^{-20}
PKMYT1	3.572607	1.03^{-21}	2.95^{-19}
CENPA	3.559453	1.44^{-24}	9.11^{-22}
CDC20	3.558272	5.58^{-26}	5.21^{-23}
TFAP2A	3.549122	1.05^{-9}	3.79^{-8}
KRT80	3.534012	1.27^{-8}	3.44^{-7}
BUB1B	3.53144	8.75^{-27}	1.28^{-23}
TOP2A	3.517749	2.74^{-19}	4.94^{-17}
CEP55	3.506943	4.71^{-28}	1.07^{-24}
E2F7	3.50029	1.17^{-17}	1.73^{-15}
AIM1L	3.491772	3.14^{-9}	1.00^{-7}
KIF4A	3.481051	5.27^{-26}	5.15^{-23}
SALL4	3.478285	2.46^{-9}	8.11^{-8}
ASPM	3.476209	1.38^{-23}	6.14^{-21}
KIF18B	3.468474	4.57^{-26}	4.69^{-23}
ESM1	3.466714	2.57^{-11}	1.32^{-9}
ORC1L	3.464595	3.68^{-25}	2.91^{-22}
MELK	3.456823	4.78^{-27}	8.18^{-24}
NCAPH	3.450599	1.61^{-26}	2.20^{-23}
EXO1	3.440049	5.45^{-25}	4.00^{-22}
KIF20A	3.436433	4.62^{-21}	1.19^{-18}
HOXC6	3.434185	8.00^{-15}	7.27^{-13}
BIRC5	3.42413	2.80^{-23}	1.06^{-20}
CTHRC1	3.417325	1.91^{-12}	1.23^{-10}
ILDR1	3.402983	1.28^{-12}	8.43^{-11}
SLC5A12	3.394853	3.65^{-7}	6.43^{-6}
CDCA2	3.37524	4.12^{-26}	4.46^{-23}
NEURL3	3.371821	2.41^{-9}	7.98^{-8}
XDH	3.367902	1.44^{-7}	2.86^{-6}
LAMP3	3.357499	4.07^{-13}	2.90^{-11}
ADAM12	3.341913	7.06^{-9}	2.07^{-7}
RRM2	3.31792	5.44^{-24}	2.81^{-21}
ETV4	3.310457	4.79^{-12}	2.92^{-10}
KIF2C	3.298608	2.86^{-26}	3.67^{-23}
TROAP	3.28744	1.64^{-23}	7.17^{-21}
HJURP	3.280499	9.29^{-23}	3.08^{-20}
CLDN1	3.274214	4.28^{-8}	9.82^{-7}
CDC25C	3.273165	3.24^{-24}	1.78^{-21}
EPR1	3.265018	4.30^{-19}	7.49^{-17}
CDC6	3.243807	1.80^{-19}	3.40^{-17}
GAD1	3.234074	3.02^{-7}	5.47^{-6}
COL7A1	3.232712	1.08^{-7}	2.21^{-6}
FAM54A	3.230059	8.57^{-26}	7.65^{-23}
KIAA1199	3.222868	1.64^{-8}	4.26^{-7}
DEPDC1	3.217269	7.50^{-23}	2.61^{-20}
KIFC1	3.209563	7.50^{-27}	1.18^{-23}
WNT2	3.19928	2.06^{-8}	5.18^{-7}
ESPN	3.179748	2.22^{-10}	9.56^{-9}
RAD54L	3.169065	9.27^{-25}	6.34^{-22}
CDCA5	3.167813	1.50^{-24}	9.11^{-22}
CCL14	–3.59732	1.81^{-7}	3.50^{-6}
TMEM100	–3.59212	4.57^{-13}	3.22^{-11}
DCAF12L1	–3.58391	1.45^{-21}	4.08^{-19}
ANGPTL1	–3.57873	1.72^{-8}	4.44^{-7}
ADHFE1	–3.57666	4.98^{-9}	1.52^{-7}
MT1G	–3.57415	2.40^{-7}	4.49^{-6}
HPGD	–3.57363	1.08^{-7}	2.21^{-6}
SCUBE2	–3.56886	3.46^{-10}	1.40^{-8}
ABI3BP	–3.56464	4.00^{-7}	6.97^{-6}
CKB	–3.5627	3.57^{-13}	2.56^{-11}
ADAMTSL1	–3.54955	8.75^{-10}	3.22^{-8}
RPRM	–3.54147	1.22^{-8}	3.31^{-7}
CNKSR2	–3.53831	2.24^{-8}	5.56^{-7}
P2RX2	–3.526	2.94^{-14}	2.48^{-12}
FAM189A2	–3.50039	1.92^{-7}	3.69^{-6}
MT1A	–3.49888	3.99^{-8}	9.22^{-7}
FBP2	–3.48933	1.22^{-7}	2.44^{-6}
GPER	–3.48819	2.93^{-14}	2.48^{-12}
PLIN4	–3.48393	3.08^{-9}	9.86^{-8}
BEX1	–3.4684	3.59^{-7}	6.35^{-6}
FIGF	–3.46045	4.84^{-13}	3.38^{-11}
CLEC3B	–3.45933	5.69^{-13}	3.92^{-11}
GPR155	–3.4569	5.78^{-15}	5.42^{-13}
FNDC5	–3.45303	5.45^{-12}	3.25^{-10}
KCNB1	–3.43614	8.75^{-8}	1.84^{-6}
CGNL1	–3.43209	1.25^{-10}	5.63^{-9}
DLG2	–3.41622	6.98^{-9}	2.05^{-7}
FAM135B	–3.41494	1.71^{-13}	1.30^{-11}
SCTR	–3.41295	4.71^{-10}	1.85^{-8}
LOC388387	–3.4074	8.44^{-29}	3.47^{-25}
CD300LG	–3.40623	4.65^{-20}	1.02^{-17}
HMP19	–3.4037	4.12^{-15}	3.93^{-13}
VIPR2	–3.39781	7.40^{-9}	2.15^{-7}
RGN	–3.37125	3.19^{-7}	5.71^{-6}
LIFR	–3.37098	1.11^{-9}	3.98^{-8}
CTNND2	–3.35913	9.23^{-9}	2.61^{-7}
DPP6	–3.355	4.74^{-10}	1.86^{-8}
TMED6	–3.34915	1.13^{-11}	6.21^{-10}
ASXL3	–3.34718	1.72^{-11}	9.12^{-10}
GUCA2B	–3.34263	5.49^{-11}	2.64^{-9}
XKR4	–3.34039	8.60^{-12}	4.85^{-10}
PLIN5	–3.31952	6.24^{-9}	1.87^{-7}
CCBE1	–3.28722	3.14^{-9}	1.00^{-7}
AR	–3.28003	7.54^{-12}	4.33^{-10}
ZNF536	–3.26982	5.40^{-9}	1.64^{-7}
SLC7A14	–3.25945	1.37^{-15}	1.38^{-13}
CELA3A	–3.25794	1.09^{-15}	1.12^{-13}
GNG7	–3.24995	2.84^{-11}	1.45^{-9}
MMRN1	–3.23996	3.81^{-7}	6.69^{-6}
SLC16A7	–3.23742	3.35^{-9}	1.06^{-7}

IQGAP3	3.166476	3.10^{-22}	9.63^{-20}
SKA3	3.165814	1.72^{-22}	5.51^{-20}
KIAA0101	3.162764	7.81^{-23}	2.67^{-20}
CKAP2L	3.159602	2.34^{-23}	9.43^{-21}
WDR62	3.157729	1.20^{-23}	5.48^{-21}
MKI67	3.147526	2.36^{-22}	7.45^{-20}
NUSAP1	3.135687	3.29^{-24}	1.78^{-21}
KYNU	3.13272	3.88^{-8}	9.01^{-7}
SDS	3.128611	3.11^{-10}	1.28^{-8}
CENPF	3.100481	1.68^{-20}	3.84^{-18}
FAP	3.100374	5.30^{-8}	1.17^{-6}
PLK1	3.100297	2.01^{-24}	1.18^{-21}
COX6B2	3.097165	3.93^{-8}	9.12^{-7}
IL11	3.094131	2.74^{-9}	8.88^{-8}
SGOL1	3.071517	8.97^{-24}	4.28^{-21}
PBK	3.063803	1.26^{-20}	2.96^{-18}
F12	3.061972	3.51^{-13}	2.53^{-11}
CLSPN	3.057566	3.64^{-26}	4.39^{-23}
ULBP1	3.055221	3.62^{-9}	1.14^{-7}
KIF18A	3.052566	1.86^{-23}	7.94^{-21}
ADAMDEC1	3.05154	1.74^{-7}	3.39^{-6}
PRR11	3.048755	5.00^{-21}	1.27^{-18}
MMP9	3.048547	3.30^{-7}	5.90^{-6}
NCAPG	3.044517	7.72^{-24}	3.78^{-21}
PTTG1	3.037405	6.47^{-21}	1.60^{-18}
FAM72A	3.036685	1.91^{-17}	2.73^{-15}
KIF15	3.033111	7.23^{-21}	1.77^{-18}
FOXM1	3.028424	4.60^{-20}	1.02^{-17}
SKA1	3.025899	9.88^{-22}	2.86^{-19}
CDCA7	3.025326	1.03^{-17}	1.53^{-15}
CHI3L1	3.019079	3.32^{-7}	5.91^{-6}
ANLN	3.016364	3.12^{-19}	5.57^{-17}
GTSE1	3.01169	5.47^{-24}	2.81^{-21}
PLA2G7	3.00477	9.31^{-12}	5.22^{-10}
ASF1B	3.001302	4.23^{-23}	1.55^{-20}
UCN2	2.997182	3.07^{-7}	5.53^{-6}
NDC80	2.986474	2.20^{-19}	4.06^{-17}
DMBX1	2.984624	5.39^{-7}	8.98^{-6}
CHRNA1	2.976836	1.93^{-9}	6.52^{-8}
UHRF1	2.963329	9.85^{-22}	2.86^{-19}
UBE2T	2.951711	6.88^{-24}	3.45^{-21}
CASC5	2.948592	9.56^{-20}	1.93^{-17}
HMMR	2.945301	1.34^{-18}	2.22^{-16}
DTL	2.94021	6.21^{-20}	1.30^{-17}
MFI2	2.937604	2.93^{-8}	7.09^{-7}
CDKN3	2.931746	3.16^{-22}	9.68^{-20}
FOXD1	2.931021	2.44^{-7}	4.56^{-6}
NEIL3	2.930878	1.12^{-13}	8.67^{-12}
OIP5	2.929227	3.11^{-20}	6.95^{-18}
POLQ	2.926249	1.87^{-18}	3.07^{-16}
LOC728606	−3.23607	9.89^{-11}	4.56^{-9}
ADCYAP1R1	−3.22985	1.67^{-22}	5.45^{-20}
LRRC2	−3.22521	3.85^{-8}	8.96^{-7}
KIT	−3.21547	1.13^{-9}	4.03^{-8}
RIC3	−3.2087	1.62^{-7}	3.18^{-6}
KL	−3.20753	3.13^{-12}	1.96^{-10}
PHYHD1	−3.206	3.37^{-8}	8.00^{-7}
CTSG	−3.19932	2.37^{-8}	5.83^{-7}
ADAMTS8	−3.17526	3.84^{-7}	6.72^{-6}
FHL1	−3.16456	4.32^{-10}	1.72^{-8}
LYVE1	−3.14353	6.11^{-10}	2.32^{-8}
P2RY14	−3.13852	3.75^{-12}	2.32^{-10}
ANGPTL3	−3.12276	4.74^{-10}	1.86^{-8}
RSPO2	−3.11992	3.07^{-7}	5.54^{-6}
GSTM5	−3.11677	1.71^{-11}	9.11^{-10}
ASTN1	−3.11144	4.28^{-7}	7.36^{-6}
CACNA2D2	−3.08638	6.45^{-9}	1.92^{-7}
FAM150B	−3.08395	1.25^{-9}	4.38^{-8}
LDB3	−3.08337	6.83^{-8}	1.47^{-6}
GUCA1C	−3.07824	1.78^{-19}	3.38^{-17}
PIRT	−3.0614	2.28^{-15}	2.25^{-13}
NTRK3	−3.05533	3.03^{-7}	5.48^{-6}
PLA2G1B	−3.04357	1.65^{-16}	2.06^{-14}
PNPLA7	−3.03827	1.78^{-9}	6.05^{-8}
LGI1	−3.03753	5.63^{-13}	3.89^{-11}
MYBPC3	−3.03695	1.70^{-16}	2.10^{-14}
LCN10	−3.028	3.55^{-10}	1.43^{-8}
UNC80	−3.02687	3.89^{-9}	1.22^{-7}
ATOH8	−3.01363	4.33^{-10}	1.72^{-8}
PTCHD1	−3.01229	4.51^{-8}	1.03^{-6}
PMP2	−3.00974	1.40^{-11}	7.52^{-10}
LOC643763	−2.99246	4.98^{-9}	1.52^{-7}
PAR5	−2.98984	1.82^{-8}	4.66^{-7}
SORBS1	−2.98508	2.51^{-8}	6.13^{-7}
KCNA5	−2.98126	1.15^{-9}	4.07^{-8}
HRH2	−2.97591	3.14^{-10}	1.29^{-8}
NEGR1	−2.97559	4.41^{-8}	1.01^{-6}
C1QTNF7	−2.97221	1.35^{-8}	3.62^{-7}
PKNOX2	−2.96779	2.11^{-10}	9.19^{-9}
CFD	−2.96355	1.37^{-9}	4.80^{-8}
SRRM4	−2.96201	6.82^{-14}	5.45^{-12}
TRPM3	−2.9595	2.16^{-13}	1.61^{-11}
SNORD116-28	−2.95027	4.33^{-8}	9.91^{-7}
APOBEC2	−2.94529	2.09^{-11}	1.09^{-9}
PDE1C	−2.93228	1.80^{-8}	4.62^{-7}
MUSK	−2.93166	1.92^{-11}	1.01^{-9}
ZNF471	−2.93141	3.86^{-9}	1.21^{-7}
RGS11	−2.92426	3.68^{-8}	8.60^{-7}
LOC572558	−2.89367	1.22^{-10}	5.52^{-9}
CPEB1	−2.88363	1.08^{-7}	2.21^{-6}

CDT1	2.914738	2.44^{-19}	4.48^{-17}
C11orf82	2.91362	1.27^{-19}	2.49^{-17}
ESPL1	2.90882	3.79^{-16}	4.37^{-14}
STIL	2.903583	1.23^{-24}	8.13^{-22}
CDK1	2.903321	2.47^{-23}	9.74^{-21}
APOC1	2.902178	2.95^{-8}	7.11^{-7}
ZNF695	2.892606	1.57^{-8}	4.13^{-7}
FAM72D	2.89045	1.03^{-18}	1.72^{-16}
FAM72B	2.890089	1.36^{-20}	3.17^{-18}
MDFI	2.869595	1.02^{-13}	7.98^{-12}
KIF4B	2.861126	8.42^{-21}	2.03^{-18}
KIF23	2.848565	8.10^{-23}	2.73^{-20}
FAM64A	2.842544	1.29^{-14}	1.14^{-12}
GABRD	2.835973	3.15^{-10}	1.29^{-8}
CENPI	2.833427	2.58^{-19}	4.68^{-17}
TRIP13	2.824225	1.93^{-16}	2.35^{-14}
SPAG5	2.81921	5.89^{-21}	1.47^{-18}
GJB3	2.811464	1.85^{-7}	3.57^{-6}
RCC1	2.804669	5.79^{-20}	1.24^{-17}
EPHB2	2.80226	4.45^{-7}	7.62^{-6}
DNAH3	2.793183	9.32^{-10}	3.42^{-8}
DEPDC1B	2.789956	4.96^{-17}	6.70^{-15}
RAD51	2.771134	3.65^{-21}	9.48^{-19}
FOXP3	2.77049	2.19^{-10}	9.49^{-9}
CTSL2	2.763218	2.77^{-8}	6.76^{-7}
FANCA	2.759216	7.49^{-23}	2.61^{-20}
SHCBP1	2.749871	2.47^{-21}	6.87^{-19}
C15orf42	2.745848	4.09^{-16}	4.62^{-14}
SPC24	2.73776	1.27^{-17}	1.87^{-15}
NOX4	2.714372	6.97^{-9}	2.05^{-7}
CENPM	2.710167	6.63^{-20}	1.36^{-17}
ISG15	2.708472	6.79^{-10}	2.54^{-8}
KIF11	2.699004	2.68^{-23}	1.04^{-20}
ESCO2	2.697202	1.85^{-16}	2.28^{-14}
C16orf59	2.673401	1.93^{-16}	2.35^{-14}
OTX1	2.665373	1.75^{-10}	7.75^{-9}
CDCA8	2.664391	9.72^{-21}	2.32^{-18}
RAD51AP1	2.662862	5.03^{-18}	7.95^{-16}
SPC25	2.662709	2.64^{-21}	7.14^{-19}
LRP8	2.659316	6.44^{-12}	3.76^{-10}
SLC4A11	2.651787	1.34^{-8}	3.61^{-7}
TTK	2.651295	2.54^{-18}	4.08^{-16}
MND1	2.645307	5.54^{-17}	7.34^{-7}
CCNB1	2.636671	9.85^{-20}	1.96^{-17}
CDCA3	2.633672	1.75^{-19}	3.36^{-17}
BLM	2.627417	6.32^{-20}	1.31^{-17}
TACSTD2	2.626955	4.46^{-7}	7.64^{-6}
MICB	2.622847	6.87^{-11}	3.24^{-9}
LAMC2	2.620916	2.37^{-7}	4.45^{-6}
BCL11B	2.60787	2.04^{-10}	8.90^{-9}
NEUROD1	−2.87106	4.95^{-7}	8.39^{-6}
NCRNA00086	−2.86601	2.98^{-7}	5.40^{-6}
CHRM2	−2.85341	8.50^{-9}	2.45^{-7}
C13orf36	−2.84731	1.07^{-10}	4.88^{-9}
IPW	−2.84678	2.33^{-7}	4.38^{-6}
NPY	−2.84466	2.90^{-8}	7.03^{-7}
PARK2	−2.84441	2.70^{-10}	1.14^{-8}
ZNF626	−2.83519	9.31^{-8}	1.94^{-6}
SNORD116-20	−2.82781	9.37^{-14}	7.35^{-12}
FBXL13	−2.80711	1.34^{-8}	3.61^{-7}
GRIP2	−2.80304	1.19^{-7}	2.41^{-6}
HS3ST4	−2.79766	4.95^{-7}	8.39^{-6}
C20orf200	−2.79696	4.00^{-9}	1.25^{-7}
LOC400043	−2.79383	1.34^{-7}	2.67^{-6}
NCRNA00092	−2.78997	8.60^{-10}	3.17^{-8}
KCNK3	−2.788	1.20^{-7}	2.42^{-6}
CHAD	−2.78532	1.95^{-7}	3.74^{-6}
GPR64	−2.78294	2.10^{-7}	4.00^{-6}
ST8SIA3	−2.78292	2.14^{-11}	1.11^{-9}
PAR-SN	−2.77935	1.67^{-7}	3.27^{-6}
RXRG	−2.77673	2.27^{-9}	7.54^{-8}
RERGL	−2.77193	4.88^{-8}	1.09^{-6}
LOC400940	−2.76496	6.85^{-17}	8.84^{-15}
RNF180	−2.75552	5.82^{-10}	2.23^{-8}
IP6K3	−2.74948	2.03^{-8}	5.13^{-7}
METTL7A	−2.74875	1.63^{-9}	5.58^{-8}
GNMT	−2.73773	2.70^{-10}	1.14^{-8}
CALY	−2.73526	7.18^{-13}	4.86^{-11}
LOC92973	−2.73265	2.49^{-7}	4.63^{-6}
PAIP2B	−2.73262	5.65^{-7}	9.37^{-6}
CELA3B	−2.73019	6.60^{-12}	3.84^{-10}
SEC14L5	−2.72378	4.05^{-10}	1.62^{-8}
C8orf84	−2.71982	3.50^{-8}	8.27^{-7}
CMA1	−2.71817	5.19^{-12}	3.13^{-10}
CNTN2	−2.71598	5.16^{-8}	1.15^{-6}
PM20D1	−2.7095	3.47^{-11}	1.73^{-9}
BAI3	−2.70514	3.96^{-8}	9.17^{-7}
WASF3	−2.69097	5.27^{-7}	8.80^{-6}
LY6H	−2.68057	1.20^{-7}	2.42^{-6}
GNAZ	−2.67685	1.06^{-7}	2.17^{-6}
C9orf4	−2.664	1.65^{-9}	5.64^{-8}
GSTA3	−2.65446	5.20^{-12}	3.13^{-10}
SORCS3	−2.64925	1.41^{-12}	9.23^{-11}
CARNS1	−2.64675	1.65^{-9}	5.64^{-8}
C8orf46	−2.64274	4.11^{-10}	1.65^{-8}
GPIHBP1	−2.63857	6.19^{-10}	2.35^{-8}
EFHA2	−2.62718	3.04^{-8}	7.30^{-7}
SDPR	−2.62234	1.99^{-8}	5.04^{-7}
VSTM2A	−2.61642	5.54^{-14}	4.52^{-12}
NECAB1	−2.61542	3.34^{-7}	5.95^{-6}

CCDC150	2.600287	9.90^{-7}	8.95^{-13}
GINS4	2.59735	1.37^{-16}	1.72^{-14}
PLAU	2.593681	9.28^{-9}	2.62^{-7}
DLX4	2.588639	5.52^{-8}	1.21^{-6}
FAM111B	2.582499	1.51^{-7}	1.51^{-13}
RECQL4	2.581802	2.15^{-19}	4.00^{-17}
GINS1	2.579582	2.90^{-18}	4.61^{-16}
CCNA2	2.576608	9.59^{-20}	1.93^{-17}
HIST1H2BH	2.575574	2.83^{-14}	2.42^{-12}
MFAP2	2.575299	2.58^{-7}	4.77^{-6}
CKS2	2.550809	2.61^{-21}	7.14^{-19}
HIST1H2BG	2.548461	4.19^{-9}	1.30^{-7}
CENPW	2.546294	1.96^{-17}	2.77^{-7}
MAD2L1	2.545398	3.60^{-21}	9.47^{-19}
HIST1H1D	2.531171	6.71^{-10}	2.52^{-8}
AURKA	2.523295	1.07^{-19}	2.11^{-17}
DNMT3B	2.519611	3.42^{-10}	1.39^{-8}
C17orf53	2.514452	1.72^{-17}	2.47^{-15}
HIST1H2BJ	2.507647	5.12^{-9}	1.56^{-7}
CLEC5A	2.504137	2.36^{-8}	5.82^{-7}
GINS2	2.502397	3.75^{-14}	3.09^{-12}
PLEK2	2.498256	3.08^{-8}	7.38^{-7}
E2F2	2.490176	2.48^{-14}	2.14^{-12}
APOBEC3B	2.48349	2.68^{-7}	4.93^{-6}
CENPK	2.473277	5.50^{-18}	8.62^{-16}
SNX10	2.468647	1.23^{-11}	6.70^{-10}
HIST1H2AE	2.466806	1.40^{-9}	4.89^{-8}
C9orf140	2.465008	3.34^{-12}	2.07^{-10}
CENPE	2.462309	5.25^{-17}	7.05^{-15}
TYMP	2.458989	4.18^{-9}	1.30^{-7}
ARHGAP11A	2.434412	5.24^{-20}	1.13^{-17}
MGC12982	2.433667	6.48^{-13}	4.43^{-11}
BRIP1	2.426783	1.19^{-15}	1.21^{-13}
ECT2	2.41301	6.10^{-17}	7.98^{-7}
TK1	2.41128	2.11^{-15}	2.09^{-13}
ORC6L	2.409918	2.43^{-17}	3.42^{-7}
MTL5	2.408202	2.09^{-8}	5.25^{-7}
FERMT1	2.401236	6.49^{-9}	1.92^{-7}
CCL3	2.400459	4.04^{-7}	7.03^{-6}
HIST1H3G	2.39009	2.17^{-7}	4.12^{-6}
PLK4	2.369456	3.86^{-19}	6.78^{-17}
PRC1	2.367573	5.27^{-19}	9.02^{-17}
CDC25B	2.361001	4.61^{-16}	5.12^{-14}
FAM40B	2.360908	9.89^{-9}	2.78^{-7}
PVT1	2.347782	2.58^{-14}	2.21^{-12}
KIAA1524	2.346872	3.05^{-15}	2.96^{-13}
RHEBL1	2.346194	6.39^{-12}	3.74^{-10}
ERCC6L	2.340202	4.09^{-16}	4.62^{-14}
MCM2	2.336373	2.82^{-13}	2.05^{-11}
C12orf48	2.33221	6.93^{-19}	1.17^{-16}
PLAC9	–2.61075	1.54^{-8}	4.06^{-7}
TMOD1	–2.59905	1.68^{-8}	4.36^{-7}
GPR44	–2.59558	7.41^{-8}	1.59^{-6}
LEPR	–2.58723	1.19^{-10}	5.39^{-9}
DAAM2	–2.56342	8.49^{-8}	1.79^{-6}
NDST3	–2.56179	3.42^{-8}	8.11^{-7}
ACACB	–2.56046	$7.69E^{-9}$	2.22^{-7}
BMX	–2.5575	3.41^{-7}	6.05^{-6}
TREH	–2.55698	4.07^{-8}	9.38^{-7}
GPR17	–2.55644	5.39^{-8}	1.19^{-6}
MYOT	–2.5552	4.13^{-8}	9.50^{-7}
BEND5	–2.5429	3.64^{-7}	6.42^{-6}
PACRG	–2.5394	1.34^{-7}	2.67^{-6}
DMRTC1B	–2.5259	9.87^{-9}	2.78^{-7}
ITIH5	–2.52559	1.81^{-7}	3.50^{-6}
ACSM5	–2.49495	9.08^{-12}	5.11^{-7}
NME5	–2.48854	1.83^{-8}	4.67^{-7}
TMEM211	–2.48763	3.21^{-11}	1.62^{-9}
RIMS3	–2.4819	2.53^{-7}	4.68^{-6}
SCN4A	–2.46938	1.39^{-7}	2.76^{-6}
CYFIP2	–2.4654	2.45^{-7}	4.57^{-6}
STK32A	–2.46223	1.12^{-9}	4.01^{-8}
ANKS1B	–2.46079	4.09^{-7}	7.10^{-6}
RCAN2	–2.45713	6.28^{-9}	1.87^{-7}
ZNF662	–2.44834	4.24^{-7}	7.31^{-6}
SYT9	–2.44653	1.51^{-9}	5.23^{-8}
SYNE1	–2.44509	6.62^{-8}	1.43^{-6}
CNGA3	–2.44422	1.95^{-7}	3.74^{-6}
CAB39L	–2.44268	7.80^{-13}	5.25^{-11}
NPAS4	–2.43338	2.22^{-9}	7.41^{-8}
FAM19A2	–2.43264	6.57^{-8}	1.42^{-6}
GDF10	–2.42476	2.26^{-7}	4.25^{-6}
SLC16A12	–2.41394	7.94^{-9}	2.29^{-7}
KCNMB2	–2.41319	1.14^{-7}	2.32^{-6}
C5orf4	–2.40356	1.05^{-9}	3.80^{-8}
DIRC3	–2.40281	4.16^{-7}	7.20^{-6}
GCNT4	–2.40015	5.10^{-7}	8.57^{-6}
CARTPT	–2.39686	1.24^{-8}	3.37^{-7}
CPB1	–2.39599	6.20^{-12}	3.65^{-10}
GRIA2	–2.38539	2.72^{-7}	4.99^{-6}
ACSM1	–2.38202	5.74^{-8}	1.26^{-6}
INE2	–2.37661	1.50^{-8}	3.96^{-7}
TNS1	–2.36871	1.69^{-7}	3.30^{-6}
GFRA2	–2.36812	4.56^{-8}	1.04^{-6}
LOC158696	–2.36586	1.51^{-8}	4.00^{-7}
TRIM74	–2.35374	1.22^{-7}	2.44^{-6}
SLC25A4	–2.34985	1.11^{-16}	1.42^{-14}
NCRNA00093	–2.34819	7.49^{-8}	1.60^{-6}
RAB9B	–2.34248	8.95^{-8}	1.87^{-6}
ZNF677	–2.33491	1.72^{-8}	4.43^{-7}

CD80	2.313115	5.39^{-8}	1.19^{-6}
NUP62CL	2.308612	1.60^{-8}	4.18^{-7}
OLFML2B	2.308225	7.02^{-8}	1.51^{-6}
FOXD2	2.304636	2.26^{-8}	5.60^{-7}
LAD1	2.272364	1.17^{-8}	3.21^{-7}
S100A3	2.271739	3.33^{-8}	7.91^{-7}
GSG2	2.26626	3.45^{-16}	4.00^{-14}
C2orf48	2.264388	8.08^{-8}	1.71^{-6}
CARD14	2.26033	2.87^{-7}	5.23^{-6}
MARVELD3	2.253772	2.99^{-10}	1.24^{-8}
POLE2	2.245019	7.02^{-17}	9.01^{-15}
TNFRSF9	2.244019	4.41^{-7}	7.57^{-6}
SGOL2	2.235959	1.68^{-19}	3.26^{-17}
LOC541471	2.228136	5.37^{-17}	7.16^{-15}
ADAMTS14	2.223122	1.17^{-7}	2.37^{-6}
XRCC2	2.222677	5.25^{-12}	3.14^{-10}
EME1	2.217925	7.04^{-16}	7.60^{-14}
CKAP2	2.215931	2.49^{-17}	3.48^{-15}
C1orf59	2.198838	1.13^{-7}	2.31^{-6}
BRCA2	2.198103	1.20^{-13}	9.25^{-12}
FANCB	2.195823	1.08^{-15}	1.12^{-13}
C16orf75	2.194914	3.82^{-12}	2.35^{-10}
TYMS	2.189381	1.90^{-13}	1.42^{-11}
CCNF	2.188065	7.02^{-18}	1.08^{-15}
GPRIN1	2.181033	7.39^{-11}	3.47^{-9}
FANCD2	2.180201	7.34^{-15}	6.72^{-13}
WDHD1	2.177645	9.31^{-16}	9.70^{-14}
E2F8	2.177293	2.80^{-10}	1.17^{-8}
TMEM26	2.172715	1.80^{-8}	4.61^{-7}
LMNB1	2.169302	2.06^{-16}	2.48^{-14}
GPR84	2.161311	1.00^{-8}	2.80^{-7}
TACC3	2.160274	3.24^{-16}	3.78^{-14}
SH3BP1	2.147913	2.61^{-10}	1.11^{-8}
HOXA1	2.143513	7.65^{-8}	1.63^{-6}
HELLS	2.128594	9.93^{-16}	1.03^{-13}
JUP	2.124753	2.85^{-7}	5.20^{-6}
PIF1	2.123283	1.76^{-14}	1.54^{-12}
HIST1H2AM	2.112599	2.66^{-10}	1.13^{-8}
RAET1K	2.105595	5.55^{-11}	2.66^{-9}
ZWINT	2.10222	5.41^{-15}	5.10^{-13}
C1orf135	2.094592	8.29^{-14}	6.57^{-12}
HIST1H1B	2.079135	1.62^{-9}	5.57^{-8}
C1orf106	2.078127	6.25^{-8}	1.36^{-6}
MEST	2.070129	2.78^{-8}	6.77^{-7}
NCRNA00152	2.067369	1.20^{-14}	1.07^{-12}
FZD2	2.063861	2.12^{-7}	4.03^{-6}
CCNE1	2.061717	1.01^{-8}	2.81^{-7}
CCR8	2.061547	3.65^{-7}	6.43^{-6}
SH2D2A	2.060475	1.94^{-11}	1.02^{-9}
C6orf150	2.057386	2.85^{-8}	6.93^{-7}
C22orf23	−2.32629	4.27^{-9}	1.32^{-7}
JPH4	−2.31158	1.94^{-7}	3.72^{-6}
RBPJL	−2.31138	3.84^{-11}	1.90^{-9}
HIST2H2BA	−2.30845	1.91^{-11}	1.00^{-9}
C3orf18	−2.30771	5.14^{-11}	2.50^{-9}
LOC100240735	−2.29989	1.01^{-8}	2.82^{-7}
RAI2	−2.29895	2.23^{-7}	4.21^{-6}
SLITRK2	−2.27544	1.71^{-7}	3.33^{-6}
ENPP3	−2.27444	5.26^{-7}	8.80^{-6}
GRIA3	−2.27144	4.68^{-7}	7.99^{-6}
C7orf41	−2.26636	3.72^{-14}	3.08^{-12}
SLC18A2	−2.26364	4.50^{-8}	1.03^{-6}
RGMB	−2.26247	2.72^{-17}	3.77^{-15}
ERO1LB	−2.26	3.67^{-8}	8.59^{-7}
SPINK13	−2.25781	4.18^{-13}	2.96^{-11}
NMUR1	−2.2396	4.23^{-7}	7.31^{-6}
GLP2R	−2.22554	1.81^{-9}	6.13^{-8}
MGC42105	−2.2226	1.01^{-9}	3.68^{-8}
DCLK2	−2.21393	4.36^{-8}	9.97^{-7}
TCF21	−2.21279	2.86^{-7}	5.21^{-6}
GRRP1	−2.2048	4.07^{-9}	1.27^{-7}
GBGT1	−2.20269	6.46^{-8}	1.40^{-6}
LRRC7	−2.20201	1.17^{-8}	3.20^{-7}
ZNF540	−2.19081	1.49^{-7}	2.95^{-6}
C21orf62	−2.18025	1.37^{-8}	3.67^{-7}
LCN6	−2.17866	8.40^{-13}	5.64^{-11}
C1orf190	−2.17686	5.79^{-7}	9.57^{-6}
FLJ43390	−2.17247	4.52^{-16}	5.06^{-14}
DLGAP2	−2.1694	6.05^{-10}	2.31^{-8}
MYH13	−2.1555	5.45^{-10}	2.10^{-8}
C14orf180	−2.15443	2.49^{-16}	2.94^{-14}
DMGDH	−2.14939	5.86^{-7}	9.66^{-6}
CLCNKB	−2.13835	1.04^{-7}	2.14^{-6}
PTF1A	−2.124	2.06^{-18}	3.35^{-16}
PDE2A	−2.1171	3.76^{-7}	6.61^{-6}
LOC100240734	−2.10155	3.00^{-10}	1.24^{-8}
GALR1	−2.10008	2.97^{-14}	2.50^{-12}
MITF	−2.09947	1.39^{-8}	3.72^{-7}
FGF10	−2.09674	3.63^{-8}	8.53^{-7}
INSRR	−2.09658	2.45^{-9}	8.10^{-8}
KBTBD10	−2.09156	9.94^{-8}	2.06^{-6}
ALDH6A1	−2.07588	4.39^{-13}	3.10^{-11}
PLIN1	−2.06816	5.52^{-8}	1.21^{-6}
ZNF582	−2.05836	1.68^{-7}	3.30^{-6}
MT3	−2.03996	5.43^{-8}	1.20^{-6}
LRIG1	−2.03626	1.05^{-8}	2.91^{-7}
SLC7A3	−2.03337	1.82^{-7}	3.52^{-6}
KCNJ13	−2.0287	1.20^{-7}	2.42^{-6}
GRIA1	−2.02418	4.71^{-8}	1.06^{-6}
FKBP5	−2.02397	1.71^{-7}	3.34^{-6}

UBE2S	2.043967	1.18^{-14}	1.05^{-12}
MCM4	2.043918	3.41^{-14}	2.84^{-12}
LRFN4	2.040168	1.46^{-13}	1.12^{-11}
KPNA2	2.036434	5.77^{-19}	9.79^{-17}
FLVCR2	2.029383	1.17^{-7}	2.37^{-6}
ARHGAP11B	2.029037	2.87^{-14}	2.45^{-12}
CYP27B1	2.028389	1.43^{-8}	3.80^{-7}
NUDT1	2.027634	5.25^{-14}	4.31^{-12}
FOXS1	2.022054	1.94^{-8}	4.93^{-7}
FAM83H	2.017941	1.68^{-7}	3.29^{-6}
PRR7	2.01105	3.28^{-10}	1.34^{-8}
CHEK1	2.008228	1.17^{-16}	1.49^{-14}
PSMB9	1.99862	5.44^{-8}	1.20^{-6}
HIST1H2BO	1.991822	9.07^{-9}	2.59^{-7}
LY6E	1.989392	2.06^{-9}	6.90^{-8}
BOP1	1.988083	7.79^{-10}	2.89^{-8}
NAGS	1.980329	1.24^{-7}	2.49^{-6}
RNASEH2A	1.96528	3.99^{-16}	4.55^{-14}
TMEM191A	1.959919	1.03^{-9}	3.74^{-8}
CKS1B	1.956427	3.87^{-16}	4.44^{-14}
FANCI	1.94458	6.38^{-15}	5.95^{-13}
RELL2	1.934017	1.64^{-9}	5.60^{-8}
TTYH3	1.930512	7.80^{-12}	4.43^{-10}
MTBP	1.927313	7.83^{-14}	6.23^{-12}
STMN1	1.925645	3.30^{-11}	1.66^{-9}
MLF1IP	1.893816	5.43^{-12}	3.24^{-10}
HMGB3	1.88992	1.72^{-10}	7.64^{-9}
ATAD5	1.883162	2.27^{-13}	1.68^{-11}
TRAIP	1.881259	4.13^{-15}	3.93^{-13}
CDC25A	1.878495	1.51^{-10}	6.72^{-9}
PLAUR	1.874658	1.14^{-8}	3.13^{-7}
NFKBIL2	1.870041	4.09^{-12}	2.51^{-10}
POC1A	1.859872	2.99^{-14}	2.50^{-12}
HIST3H2BB	1.843513	4.55^{-7}	7.79^{-6}
DNA2	1.835298	1.06^{-12}	7.05^{-11}
EZH2	1.834747	6.57^{-14}	5.27^{-12}
HIST1H1E	1.831707	6.11^{-8}	1.33^{-6}
TAP1	1.820011	3.35^{-10}	1.36^{-8}
TRPM2	1.817421	2.13^{-8}	5.34^{-7}
CDCA4	1.815898	3.41^{-11}	1.70^{-9}
C2orf27A	1.81537	7.56^{-8}	1.61^{-6}
PYCARD	1.798926	6.63^{-10}	2.49^{-8}
TNFRSF4	1.789713	5.09^{-7}	8.57^{-6}
BRCA1	1.786722	3.03^{-12}	1.90^{-10}
PPAP2C	1.786218	1.85^{-7}	3.57^{-6}
C5orf34	1.786059	2.80^{-9}	9.09^{-8}
TRIM59	1.781342	3.65^{-11}	1.81^{-9}
TIMELESS	1.77738	1.60^{-14}	1.41^{-12}
CHRNA5	1.775657	1.23^{-8}	3.35^{-7}
PCNA	1.757514	2.02^{-14}	1.76^{-12}
SV2C	−2.02137	6.09^{-12}	3.59^{-10}
CBX7	−2.01933	9.21^{-11}	4.26^{-9}
ADRA1A	−2.01656	3.26^{-8}	7.76^{-7}
DUSP19	−2.00373	5.16^{-11}	2.50^{-9}
SH3BGR	−2.00318	5.35^{-8}	1.18^{-6}
LRRC3B	−1.99899	5.77^{-9}	1.74^{-7}
PLCL1	−1.99398	4.84^{-7}	8.24^{-6}
LGI4	−1.99274	5.18^{-7}	8.68^{-6}
GPR146	−1.98842	2.97^{-13}	2.16^{-11}
GLUL	−1.98429	1.84^{-8}	4.70^{-7}
HCN1	−1.98059	1.20^{-7}	2.42^{-6}
TSC22D3	−1.95759	4.65^{-8}	1.05^{-6}
DGKD	−1.95474	6.16^{-9}	1.84^{-7}
GPRASP1	−1.94493	1.61^{-7}	3.16^{-6}
PDE8B	−1.93234	4.74^{-7}	8.09^{-6}
SLC8A3	−1.93097	2.90^{-7}	5.27^{-6}
MAP1LC3C	−1.92572	1.07^{-9}	3.85^{-8}
KLF9	−1.91051	1.88^{-7}	3.61^{-6}
LOC148696	−1.90988	3.02^{-7}	5.47^{-6}
ITPR1	−1.90817	1.05^{-7}	2.16^{-6}
CAPZA3	−1.9071	1.39^{-8}	3.72^{-7}
ARHGEF37	−1.90477	3.25^{-8}	7.75^{-7}
ARHGAP24	−1.90262	1.63^{-8}	4.26^{-7}
FAM180B	−1.89978	1.09^{-13}	8.44^{-12}
GPT2	−1.89654	7.52^{-8}	1.61^{-6}
AVPR1B	−1.89455	1.06^{-10}	4.86^{-9}
TUSC5	−1.89348	1.95^{-10}	8.54^{-9}
C8orf12	−1.89115	2.55^{-10}	1.10^{-8}
TCEAL5	−1.87393	3.02^{-9}	9.72^{-8}
TENC1	−1.85917	6.01^{-10}	2.30^{-8}
SYT10	−1.84531	1.17^{-8}	3.20^{-7}
PRKACB	−1.81921	6.93^{-8}	1.49^{-6}
ZCWPW2	−1.80588	1.96^{-8}	4.97^{-7}
TMEM220	−1.80525	4.28^{-7}	7.36^{-6}
KIAA1409	−1.80215	4.96^{-8}	1.10^{-6}
NT5C1A	−1.79934	1.05^{-12}	6.99^{-11}
PHOX2B	−1.79895	1.48^{-10}	6.59^{-9}
KIAA0427	−1.78706	2.28^{-13}	1.68^{-11}
NRTN	−1.77875	3.39^{-7}	6.03^{-6}
RD3	−1.77624	1.89^{-11}	9.96^{-10}
FRMPD4	−1.77324	1.40^{-8}	3.72^{-7}
C10orf129	−1.72109	2.40^{-16}	2.84^{-14}
ACADSB	−1.72069	2.94^{-10}	1.22^{-8}
TCEAL6	−1.72033	2.91^{-9}	9.41^{-8}
NR2E3	−1.71389	5.01^{-9}	1.52^{-7}
C6orf201	−1.71383	3.86^{-8}	8.97^{-7}
KAT2B	−1.6979	5.88^{-8}	1.28^{-6}
G6PC2	−1.69777	1.86^{-9}	6.30^{-8}
TMEM8B	−1.69638	5.21^{-8}	1.16^{-6}
PHF17	−1.68113	2.15^{-8}	5.37^{-7}

HIST1H2AG	1.755493	1.06^{-8}	2.93^{-7}
VDR	1.734706	1.13^{-9}	4.04^{-8}
ITGA2	1.728534	1.32^{-7}	2.64^{-6}
HMGA1	1.72428	1.04^{-9}	3.76^{-8}
OAS3	1.723435	4.62^{-9}	1.42^{-7}
SLC16A13	1.717089	1.51^{-9}	5.23^{-8}
WDR67	1.71429	8.52^{-16}	8.97^{-14}
KNTC1	1.711691	9.17^{-14}	7.21^{-12}
GGH	1.707908	5.34^{-7}	8.91^{-6}
CHEK2	1.707331	7.93^{-15}	7.23^{-13}
RTN4R	1.704412	1.43^{-7}	2.82^{-6}
E2F1	1.701482	5.22^{-12}	3.13^{-10}
DLEU2	1.699736	2.19^{-10}	9.49^{-9}
RAD54B	1.697579	2.17^{-10}	9.45^{-9}
C18orf56	1.696921	1.27^{-7}	2.54^{-6}
CHAF1B	1.694557	6.79^{-11}	3.21^{-9}
DSCC1	1.691738	6.50^{-11}	3.09^{-9}
TNFRSF25	1.690603	2.00^{-9}	6.73^{-8}
FEN1	1.688372	1.58^{-13}	1.21^{-11}
LOC100130776	1.683524	1.31^{-7}	2.61^{-6}
HIST1H2AL	1.679907	2.31^{-9}	7.69^{-8}
CENPH	1.671686	2.92^{-10}	1.22^{-8}
HN1	1.659611	6.68^{-13}	4.55^{-11}
IL4I1	1.658173	4.36^{-7}	7.49^{-6}
RFC4	1.64708	1.92^{-9}	6.49^{-8}
KIF20B	1.64419	1.20^{-11}	6.56^{-10}
EFNB1	1.643755	5.57^{-7}	9.26^{-6}
MTHFD1L	1.642642	3.78^{-13}	2.71^{-11}
TLCD1	1.630242	8.86^{-9}	2.54^{-7}
TEAD4	1.629647	1.48^{-12}	9.63^{-11}
RBL1	1.625763	7.34^{-12}	4.22^{-10}
FGD6	1.623871	7.28^{-10}	2.71^{-8}
DLEU7	1.620713	7.63^{-8}	1.62^{-6}
NME1	1.618642	2.27^{-12}	1.44^{-10}
RFC3	1.616516	9.81^{-12}	5.44^{-10}
LMNB2	1.61621	1.03^{-12}	6.91^{-11}
C19orf40	1.610737	4.01^{-11}	1.98^{-9}
RACGAP1	1.609978	4.94^{-13}	3.44^{-11}
RELT	1.60906	2.88^{-11}	1.46^{-9}
HAPLN3	1.601683	5.00^{-7}	8.44^{-6}
CDC7	1.600854	4.80^{-10}	1.88^{-8}
ARPC1B	1.600337	5.34^{-10}	2.06^{-8}
MCM7	1.599901	2.46^{-9}	8.12^{-8}
PSRC1	1.59458	1.71^{-8}	4.43^{-7}
C1orf112	1.590204	7.95^{-16}	8.46^{-14}
HIST2H2AC	1.586672	1.65^{-8}	4.29^{-7}
FAM110A	1.583111	6.44^{-10}	2.43^{-8}
S100A11	1.582899	2.10^{-7}	4.00^{-6}
DBF4	1.573702	6.54^{-11}	3.10^{-9}
NRM	1.570688	3.99^{-10}	1.60^{-8}

GABRA1	−1.6811	6.05^{-8}	1.32^{-6}
TPCN2	−1.6795	2.59^{-7}	4.77^{-6}
PRX	−1.67942	3.26^{-11}	1.64^{-9}
SPHKAP	−1.67785	2.51^{-7}	4.66^{-6}
UBL3	−1.67208	3.92^{-9}	1.23^{-7}
C4orf12	−1.669	3.15^{-9}	1.00^{-7}
FAM165B	−1.66267	2.34^{-12}	1.49^{-10}
DIXDC1	−1.65808	3.06^{-7}	5.52^{-6}
GSN	−1.65296	3.90^{-9}	1.22^{-7}
GRIK1	−1.6519	1.15^{-8}	3.15^{-7}
DDI1	−1.65113	1.01^{-8}	2.82^{-7}
AFM	−1.63625	1.45^{-11}	7.78^{-10}
CMTM5	−1.63451	2.76^{-11}	1.41^{-9}
GPHA2	−1.63371	2.05^{-8}	5.18^{-7}
ELANE	−1.61779	9.72^{-9}	2.74^{-7}
MYLK3	−1.61764	2.22^{-7}	4.19^{-6}
NPY2R	−1.6134	2.28^{-14}	1.98^{-12}
RAB11FIP2	−1.60435	8.64^{-14}	6.82^{-12}
SIK2	−1.58575	7.25^{-13}	4.89^{-11}
GPD1L	−1.57613	1.63^{-7}	3.20^{-6}
KANK3	−1.56289	1.54^{-7}	3.04^{-6}
PBXIP1	−1.56273	2.93^{-11}	1.49^{-9}
CRY2	−1.54696	5.14^{-15}	4.87^{-13}
CNTD1	−1.54593	2.10^{-8}	5.29^{-7}
FAM63A	−1.52609	1.88^{-8}	4.79^{-7}
C14orf159	−1.50804	1.43^{-12}	9.32^{-11}
LTBP4	−1.50574	5.66^{-7}	9.37^{-6}
SNTG2	−1.50063	2.47^{-8}	6.06^{-7}
STX12	−1.49659	6.02^{-17}	7.93^{-15}
SIDT2	−1.49082	6.67^{-11}	3.16^{-9}
ZNF132	−1.48009	3.03^{-8}	7.28^{-7}
ACAT1	−1.47712	5.66^{-11}	2.70^{-9}
PDCD4	−1.47455	3.08^{-9}	9.87^{-8}
GTF2IRD2P1	−1.47158	1.18^{-7}	2.40^{-6}
SLC25A18	−1.4692	2.36^{-9}	7.84^{-8}
CELA2A	−1.45954	1.51^{-24}	9.11^{-22}
RGNEF	−1.45699	4.00^{-7}	6.96^{-06}
PXMP2	−1.44333	3.31^{-8}	7.88^{-7}
PCCA	−1.43417	9.64^{-8}	2.01^{-6}
ARHGAP10	−1.42347	4.69^{-7}	8.00^{-6}
EPM2A	−1.4219	7.12^{-8}	1.53^{-6}
RAB27A	−1.42065	4.30^{-9}	1.33^{-7}
ITGB1BP3	−1.42055	2.09^{-9}	6.99^{-8}
C9orf106	−1.40523	3.60^{-7}	6.36^{-6}
GABARAPL1	−1.39716	4.88^{-7}	8.29^{-6}
ETFDH	−1.39083	2.70^{-9}	8.82^{-8}
ALAD	−1.3908	4.71^{-13}	3.30^{-11}
MYT1L	−1.37615	2.01^{-9}	6.75^{-8}
ZBTB47	−1.37461	1.45^{-8}	3.85^{-7}
SUCLG2	−1.36152	8.87^{-8}	1.86^{-6}

ANGPT2	1.566791	5.55^{-7}	9.23^{-6}
RCC2	1.561688	6.98^{-15}	6.43^{-13}
STAT1	1.56075	1.15^{-8}	3.16^{-7}
NCAPG2	1.560619	$4.90E^{-9}$	1.50^{-7}
ZNF367	1.560265	2.63^{-9}	8.61^{-8}
PAQR4	1.554429	6.07^{-10}	2.31^{-8}
SERPINH1	1.552833	4.45^{-7}	7.62^{-6}
CHTF18	1.549265	7.26^{-11}	3.41^{-9}
DDX12	1.545887	1.59^{-9}	5.46^{-8}
FAM49B	1.523384	4.66^{-16}	5.14^{-14}
KIF22	1.521953	3.84^{-15}	3.69^{-13}
HIST1H4J	1.520214	4.72^{-8}	1.06^{-6}
PRIM1	1.518714	3.46^{-10}	1.40^{-8}
LOC100125556	1.517737	1.33^{-7}	2.65^{-6}
C6orf167	1.494941	1.77^{-13}	1.34^{-11}
ZWILCH	1.486567	1.89^{-13}	1.42^{-11}
CKLF	1.484724	2.71^{-10}	1.14^{-8}
MYO1B	1.479924	1.03^{-7}	2.12^{-6}
TAP2	1.479657	1.85^{-11}	9.76^{-10}
CEP72	1.478485	2.51^{-8}	6.13^{-7}
MMP14	1.475354	3.29^{-7}	5.89^{-6}
MCM5	1.464117	6.45^{-9}	1.92^{-7}
DDX39	1.460591	6.42^{-14}	5.17^{-12}
CENPO	1.451816	2.25^{-11}	1.16^{-9}
NPM3	1.450416	4.63^{-9}	1.42^{-7}
CDH24	1.4492	3.93^{-7}	6.87^{-6}
H2AFX	1.448933	1.31^{-9}	4.60^{-8}
TMC6	1.431694	6.49^{-11}	3.09^{-9}
ATAD2	1.422932	6.78^{-9}	2.01^{-7}
ACOT7	1.422396	3.57^{-9}	1.13^{-7}
SKP2	1.416473	3.26^{-7}	5.84^{-6}
C6orf115	1.409686	6.51^{-10}	2.45^{-8}
TMEM206	1.388974	2.61^{-10}	1.11^{-8}
PAFAH1B3	1.38859	1.44^{-8}	3.82^{-7}
LIG1	1.381854	7.77^{-12}	4.42^{-10}
SPINT2	1.380366	5.35^{-7}	8.93^{-6}
RHBDF2	1.369616	1.72^{-8}	4.44^{-7}
NMI	1.369378	4.15^{-11}	2.04^{-9}
HIST1H3F	1.366403	8.82^{-8}	1.85^{-6}
LOC100128191	1.356284	6.03^{-7}	9.93^{-6}
TCF19	1.349136	5.16^{-10}	2.01^{-8}
BMP1	1.345339	6.08^{-7}	9.99^{-6}
PRIM2	1.339433	1.59^{-12}	1.03^{-10}
BCL2L12	1.332988	7.76^{-12}	4.42^{-10}
CENPL	1.328331	8.50^{-12}	4.81^{-10}
OBFC2A	1.326439	3.81^{-7}	6.69^{-6}
RTKN	1.326006	1.89^{-10}	8.33^{-9}
C13orf34	1.325018	9.15^{-10}	3.36^{-8}
BID	1.323553	5.82^{-10}	2.23^{-8}
NCAPD2	1.316077	3.57^{-8}	8.40^{-7}
XYLT2	−1.35885	1.07^{-8}	2.95^{-7}
TOM1L2	−1.35781	1.05^{-7}	2.16^{-6}
NFIC	−1.35645	1.21^{-8}	3.29^{-7}
LOC148145	−1.35605	1.59^{-8}	4.16^{-7}
KCNIP4	−1.34721	1.30^{-8}	3.51^{-7}
TBC1D14	−1.34439	5.71^{-12}	3.38^{-10}
SYNJ2BP	−1.33967	5.70^{-13}	3.92^{-11}
C17orf103	−1.33951	2.13^{-7}	4.04^{-6}
HPR	−1.33373	5.59^{-7}	9.29^{-6}
LRRC52	−1.31963	5.76^{-18}	8.96^{-16}
MAS1L	−1.31124	1.93^{-12}	1.23^{-10}
SYCN	−1.30901	7.29^{-10}	2.71^{-8}
C5orf53	−1.3048	4.70^{-8}	1.06^{-6}
FYCO1	−1.30381	1.51^{-8}	3.99^{-7}
BCKDHB	−1.3022	4.21^{-7}	7.29^{-6}
BTD	−1.29777	2.10^{-7}	4.00^{-6}
USP53	−1.29765	2.60^{-8}	6.35^{-7}
TMEM161B	−1.29758	9.77^{-12}	5.44^{-10}
MLYCD	−1.28187	5.55^{-14}	4.52^{-12}
PTPN21	−1.27985	3.00^{-9}	9.66^{-8}
TSPYL4	−1.2765	8.90^{-9}	2.55^{-7}
DBT	−1.27085	4.95^{-10}	1.93^{-8}
CPEB3	−1.27005	4.96^{-7}	8.40^{-6}
GTF2IRD2	−1.25929	4.93^{-8}	1.10^{-6}
SECISBP2L	−1.24025	1.26^{-10}	5.69^{-9}
ZHX3	−1.23569	5.79^{-10}	2.23^{-8}
LMOD2	−1.2305	2.11^{-7}	4.01^{-6}
SPHAR	−1.22356	8.54^{-10}	3.16^{-8}
FOXN3	−1.22195	2.12^{-9}	7.09^{-8}
CALCOCO1	−1.19742	2.71^{-8}	6.61^{-7}
BDH2	−1.18819	5.37^{-7}	8.95^{-6}
KIAA1191	−1.18368	7.77^{-16}	8.31^{-14}
PAR1	−1.16181	1.19^{-7}	2.41^{-6}
C4orf34	−1.16126	5.14^{-7}	8.63^{-6}
LOC100192426	−1.16	6.07^{-9}	1.82^{-7}
VAMP2	−1.15068	5.78^{-8}	1.26^{-6}
CCNG1	−1.1371	3.61^{-7}	6.37^{-6}
ACO2	−1.11728	1.14^{-12}	7.53^{-11}
MYH2	−1.1092	1.05^{-9}	3.80^{-8}
CIRBP	−1.09896	3.60^{-10}	1.45^{-8}
NICN1	−1.09111	4.91^{-8}	1.10^{-6}
CLN8	−1.08609	2.41^{-7}	4.50^{-6}
LIPJ	−1.08339	6.89^{-9}	2.03^{-7}
PTH	−1.08176	2.68^{-9}	8.76^{-8}
UMOD	−1.08097	4.71^{-8}	1.06^{-6}
ZNF778	−1.07137	1.24^{-9}	4.36^{-8}
PPP1R12C	−1.06992	5.47^{-10}	2.11^{-8}
PINK1	−1.0632	3.55^{-8}	8.36^{-7}
FAM54B	−1.06249	5.26^{-11}	2.54^{-9}
KIAA0232	−1.06073	7.77^{-8}	1.65^{-6}

FIGNL1	1.315335	7.07^{-9}	2.07^{-7}
PSME2	1.312885	6.69^{-9}	1.98^{-7}
PDSS1	1.310905	1.08^{-7}	2.22^{-6}
CCDC138	1.308193	7.59^{-8}	1.62^{-6}
ACTL6A	1.306269	2.26^{-9}	7.53^{-8}
TMSB10	1.305358	5.24^{-8}	1.16^{-6}
C20orf20	1.302404	7.10^{-13}	4.83^{-11}
POLD1	1.301781	8.37^{-11}	3.89^{-9}
ANXA2	1.298532	5.79^{-7}	9.57^{-6}
DSN1	1.291452	3.79^{-11}	1.88^{-9}
DNMT1	1.290286	3.12^{-11}	1.58^{-9}
MCM8	1.289962	2.32^{-8}	5.74^{-7}
CHAF1A	1.288876	1.20^{-10}	5.45^{-9}
ECE2	1.286987	2.41^{-7}	4.51^{-6}
ACYP1	1.285392	6.21^{-10}	2.35^{-8}
SMC4	1.283827	3.18^{-8}	7.62^{-7}
CCDC18	1.280802	5.17^{-7}	8.66^{-6}
TMEM48	1.277845	1.23^{-9}	4.32^{-8}
AMMECR1	1.277103	1.92^{-8}	4.89^{-7}
DTYMK	1.276254	7.99^{-11}	3.72^{-9}
C21orf45	1.272301	9.35^{-9}	2.64^{-7}
PUS7	1.263896	9.83^{-8}	2.04^{-6}
RUVBL1	1.263432	4.91^{-9}	1.50^{-7}
KIF24	1.261355	3.09^{-7}	5.56^{-6}
SASS6	1.260953	2.58^{-9}	8.48^{-8}
XPR1	1.257974	1.86^{-7}	3.58^{-6}
EFNA4	1.251818	1.73^{-7}	3.38^{-6}
FBXO5	1.249368	1.55^{-9}	5.35^{-8}
GPR172A	1.245045	4.24^{-9}	1.32^{-7}
AGTRAP	1.242297	4.11^{-7}	7.12^{-6}
RPA3	1.2394	2.63^{-9}	8.61^{-8}
TUBA1C	1.235471	7.66^{-8}	1.63^{-6}
CENPN	1.235213	2.36^{-10}	1.02^{-8}
GEN1	1.234939	1.48^{-9}	5.15^{-8}
PFDN2	1.234562	6.89^{-10}	2.58^{-8}
TTF2	1.228387	9.15^{-9}	2.61^{-7}
CBX3	1.228256	7.63^{-12}	4.36^{-10}
SNRPG	1.227927	2.12^{-11}	1.10^{-9}
PARP14	1.224274	4.06^{-7}	7.06^{-6}
MCM6	1.220917	5.92^{-9}	1.78^{-7}
ALG3	1.216013	6.11^{-9}	1.83^{-7}
PAICS	1.207859	4.58^{-9}	1.41^{-7}
WDR34	1.204801	2.18^{-8}	5.43^{-7}
CCDC99	1.201195	3.09^{-9}	9.88^{-8}
CCT5	1.197692	2.97^{-9}	9.59^{-8}
HSPE1	1.194476	6.39^{-9}	1.90^{-7}
FAM60A	1.184501	1.32^{-7}	2.64^{-6}
NUP37	1.183735	1.54^{-10}	6.82^{-9}
SNRPB	1.182127	2.60^{-10}	1.11^{-8}
CCDC77	1.180986	1.33^{-7}	2.65^{-6}
BCL2L2	−1.05702	1.60^{-9}	5.50^{-8}
FAM172A	−1.05107	4.99^{-8}	1.11^{-6}
SGSM2	−1.04608	2.13^{-8}	5.34^{-7}
KIF1C	−1.03814	2.46^{-8}	6.04^{-7}
INPP5A	−1.03527	3.67^{-9}	1.16^{-7}
MOAP1	−1.02902	1.35^{-8}	3.62^{-7}
CCNI	−1.00583	8.61^{-10}	3.18^{-8}
MYST4	−1.0051	9.34^{-10}	3.42^{-8}
FLJ33630	−0.96554	2.21^{-7}	4.18^{-6}
SGSM3	−0.96051	2.60^{-7}	4.79^{-6}
ABL1	−0.92845	9.22^{-9}	2.61^{-7}
PLA2G12A	−0.91968	3.68^{-9}	1.16^{-7}
C22orf39	−0.91839	1.70^{-7}	3.32^{-6}
PSKH1	−0.91543	1.79^{-7}	3.48^{-6}
NISCH	−0.91102	1.50^{-7}	2.95^{-6}
TAPT1	−0.90649	3.80^{-8}	8.86^{-7}
HERC1	−0.89259	3.66^{-8}	8.59^{-7}
AK3	−0.88849	1.95^{-7}	3.74^{-6}
TADA2B	−0.88831	2.94^{-8}	7.09^{-7}
PCBD2	−0.88716	5.78^{-8}	1.26^{-6}
ERGIC1	−0.87904	3.54^{-7}	6.28^{-6}
ACADVL	−0.87369	3.14^{-7}	5.65^{-6}
DEAF1	−0.86659	1.13^{-7}	2.30^{-6}
BBS1	−0.86051	3.61^{-7}	6.37^{-6}
FBXW11	−0.85407	9.91^{-9}	2.78^{-7}
RAB4A	−0.85288	1.74^{-8}	4.46^{-7}
COX6A2	−0.8447	3.39^{-7}	6.02^{-6}
KIAA0494	−0.84169	6.81^{-8}	1.47^{-6}
SPRYD3	−0.84049	1.28^{-8}	3.45^{-7}
KIAA0141	−0.83748	1.26^{-8}	3.42^{-7}
SNX1	−0.83406	1.57^{-11}	8.39^{-10}
FBXL5	−0.834	1.05^{-8}	2.91^{-7}
C10orf120	−0.81729	1.79^{-8}	4.60^{-7}
CRBN	−0.81293	2.24^{-7}	4.23^{-6}
ZFYVE20	−0.80356	8.99^{-8}	1.88^{-6}
C15orf17	−0.79965	2.40^{-7}	4.49^{-6}
KIAA0430	−0.79094	1.71^{-8}	4.42^{-7}
IQCF6	−0.78469	1.58^{-8}	4.16^{-7}
TOR1AIP1	−0.76417	2.70^{-7}	4.96^{-6}
RAF1	−0.76278	1.08^{-9}	3.90^{-8}
RNF14	-0.76014	7.40^{-9}	2.15^{-7}
TCEB3	−0.75443	6.96^{-8}	1.49^{-6}
CAMTA2	−0.73608	4.81^{-8}	1.08^{-6}
ATPAF1	−0.73367	5.60^{-8}	1.23^{-6}
PGRMC2	−0.71264	2.09^{-7}	3.99^{-6}
HADHB	−0.69722	2.94^{-8}	7.10^{-7}
EIF4B	−0.68633	2.57^{-7}	4.75^{-6}
NAT15	−0.64685	9.67^{-8}	2.01^{-6}
FLJ39609	−0.61099	1.71^{-7}	3.33^{-6}
C21orf94	−0.55847	2.68^{-13}	1.97^{-11}

C16orf93	1.179549	5.92^{-7}	9.75^{-6}
DBF4B	1.178228	7.88^{-8}	1.67^{-6}
HDGF	1.177462	2.75^{-13}	2.01^{-11}
CBFB	1.176623	4.55^{-11}	2.22^{-9}
DKC1	1.176445	5.54^{-11}	2.66^{-9}
RANBP1	1.171616	3.52^{-8}	8.30^{-7}
PSMB3	1.165716	1.71^{-8}	4.43^{-7}
HAUS8	1.164681	2.71^{-9}	8.83^{-8}
GLT25D1	1.158938	1.36^{-9}	4.75^{-8}
DDX11	1.156039	9.72^{-8}	2.02^{-6}
SNRPD1	1.155409	2.88^{-9}	9.32^{-8}
C3orf26	1.153032	5.66^{-7}	9.37^{-6}
DCLRE1B	1.149861	4.15^{-10}	1.66^{-8}
AIMP2	1.149184	2.58^{-9}	8.49^{-8}
MASTL	1.147064	8.93^{-9}	2.55^{-7}
YDJC	1.147003	4.22^{-8}	9.70^{-7}
INCENP	1.144889	9.18^{-9}	2.61^{-7}
NUDT5	1.143951	1.37^{-8}	3.67^{-7}
THOC6	1.136903	4.58^{-8}	1.04^{-6}
UCK2	1.135606	2.55^{-11}	1.31^{-9}
ARL6IP6	1.134609	2.12^{-8}	5.32^{-7}
E2F3	1.134516	8.44^{-8}	1.78^{-6}
C19orf48	1.134182	3.19^{-7}	5.71^{-6}
TUBB	1.13258	1.93^{-9}	6.50^{-8}
PYCRL	1.131708	3.05^{-7}	5.51^{-6}
ENO1	1.131706	3.25^{-7}	5.82^{-6}
LOC388796	1.13027	4.29^{-8}	9.82^{-7}
DCAF13	1.128683	1.87^{-10}	8.25^{-9}
PPIA	1.127485	5.80^{-9}	1.75^{-7}
ANP32E	1.126247	2.99^{-8}	7.18^{-7}
SNHG1	1.126012	7.20^{-9}	2.10^{-7}
C7orf11	1.12556	1.23^{-9}	4.32^{-8}
BAX	1.124731	4.36^{-11}	2.13^{-9}
PARP12	1.124385	2.25^{-7}	4.24^{-6}
CENPQ	1.12339	5.18^{-7}	8.68^{-6}
BRIX1	1.121588	6.66^{-8}	1.44^{-6}
GGCT	1.115748	2.24^{-8}	5.56^{-7}
GNB1L	1.111896	2.72^{-7}	4.99^{-6}
BOLA2	1.111301	8.05^{-8}	1.70^{-6}
MCM3	1.109794	9.57^{-8}	2.00^{-6}
TRIM14	1.100556	5.06^{-7}	8.53^{-6}
SIP1	1.096658	6.98^{-9}	2.05^{-7}
TCF3	1.095067	1.51^{-9}	5.23^{-8}
TFAP4	1.095025	3.31^{-7}	5.91^{-6}
THOC4	1.088414	7.71^{-10}	2.87^{-8}
SNX8	1.075888	2.88^{-8}	6.97^{-7}
PSMG3	1.070282	4.93^{-8}	1.10^{-6}
NOP2	1.070211	8.71^{-9}	2.50^{-7}
SMC2	1.068701	4.25^{-7}	7.32^{-6}
PFDN4	1.065295	3.81^{-8}	8.87^{-7}
GPR6	−0.53623	2.32^{-7}	4.35^{-6}
C10orf96	−0.49618	1.50^{-9}	5.20^{-8}
LOC254312	−0.44144	4.55^{-10}	1.80^{-8}
HNRNPR	0.57492	4.99^{-7}	8.42^{-6}
HNRNPL	0.590165	4.57^{-10}	1.80^{-8}
DAZAP1	0.610266	9.75^{-8}	2.02^{-6}
U2AF2	0.642364	2.80^{-8}	6.81^{-7}
HNRNPC	0.644821	3.27^{-9}	1.04^{-7}
SFRS2	0.656789	5.74^{-9}	1.74^{-7}
CALR	0.659243	3.93^{-7}	6.87^{-6}
GABPB1	0.661924	2.90^{-7}	5.28^{-6}
HNRNPA2B1	0.667637	9.65^{-9}	2.72^{-7}
WDR75	0.675004	3.99^{-8}	9.22^{-7}
UTP6	0.680642	2.27^{-8}	5.62^{-7}
RALY	0.683153	5.63^{-8}	1.24^{-6}
TXNDC12	0.706534	5.04^{-8}	1.12^{-6}
G3BP1	0.706841	1.34^{-7}	2.67^{-6}
NOL11	0.712786	2.76^{-7}	5.04^{-6}
ALG6	0.725586	5.05^{-7}	8.51^{-6}
RAVER1	0.734351	2.24^{-8}	5.56^{-7}
FUS	0.734773	1.82^{-7}	3.52^{-6}
PSMB4	0.744994	3.57^{-7}	6.31^{-6}
PTGES3	0.748936	6.71^{-8}	1.45^{-6}
TXNDC9	0.750404	1.06^{-8}	2.94^{-7}
SNRNP40	0.751298	4.22^{-7}	7.30^{-6}
PTBP1	0.752477	2.51^{-13}	1.84^{-11}
ARPC5	0.753787	7.02^{-9}	2.06^{-7}
TSN	0.758052	2.19^{-7}	4.14^{-6}
PSMA5	0.764495	1.12^{-7}	2.28^{-6}
MRPL9	0.767827	3.51^{-7}	6.24^{-6}
HMGN4	0.769222	4.23^{-7}	7.30^{-6}
SNRPA	0.775645	1.41^{-8}	3.75^{-7}
SGPL1	0.78535	5.86^{-7}	9.66^{-6}
SF3B14	0.794597	2.88^{-7}	5.24^{-6}
HDAC1	0.804135	1.99^{-7}	3.80^{-6}
UTP18	0.806271	5.81^{-8}	1.27^{-6}
EIF3B	0.815418	2.67^{-7}	4.92^{-6}
EFTUD2	0.824148	2.35^{-8}	5.79^{-7}
TMEM41A	0.825887	3.11^{-7}	5.60^{-6}
MRTO4	0.826819	4.95^{-7}	8.39^{-6}
CAPZA1	0.827365	7.69^{-9}	2.22^{-7}
CPSF3	0.830092	1.10^{-7}	2.25^{-6}
TPM3	0.830478	1.17^{-9}	4.14^{-8}
DDX27	0.83062	3.20^{-8}	7.66^{-7}
PRPF19	0.830865	5.14^{-7}	8.63^{-6}
BUB3	0.837391	3.11^{-10}	1.28^{-8}
ODF2	0.838437	3.67^{-8}	8.59^{-7}
NUP85	0.841109	1.94^{-8}	4.93^{-7}
EBNA1BP2	0.842174	4.51^{-8}	1.03^{-6}
APEX2	0.844235	3.83^{-7}	6.71^{-6}

ARL6IP1	1.065266	4.46^{-8}	1.02^{-6}
RFC5	1.064226	2.63^{-7}	4.85^{-6}
DONSON	1.061459	1.55^{-8}	4.08^{-7}
PPIL5	1.057998	1.16^{-9}	4.12^{-8}
F11R	1.057548	2.73^{-7}	5.00^{-6}
LYAR	1.050335	3.95^{-7}	6.89^{-6}
DNAJC9	1.049024	2.73^{-10}	1.15^{-8}
TIPIN	1.042646	2.05^{-7}	3.92^{-6}
YIF1B	1.042492	9.17^{-9}	2.61^{-7}
C8orf76	1.037831	1.96^{-10}	8.57^{-9}
CSTF2	1.037034	1.08^{-8}	2.96^{-7}
LSM7	1.029468	2.09^{-7}	3.99^{-6}
NR2C2AP	1.022172	7.22^{-9}	2.10^{-7}
C13orf37	1.015826	3.15^{-7}	5.65^{-6}
CDK2	1.013762	2.33^{-8}	5.75^{-7}
MAGOH	1.000894	3.08^{-10}	1.27^{-8}
Down-regulated genes			
PGA4	–11.2322	1.36^{-17}	1.98^{-15}
PGA3	–10.6284	9.49^{-18}	1.43^{-15}
LIPF	–10.212	4.12^{-13}	2.92^{-11}
PGA5	–9.68686	4.26^{-22}	1.27^{-19}
ATP4A	–9.11147	4.01^{-22}	1.21^{-19}
GKN1	–9.03437	6.77^{-17}	8.79^{-15}
ATP4B	–8.27986	2.92^{-21}	7.78^{-19}
GIF	–7.84895	2.08^{-14}	1.81^{-12}
CHIA	–7.71384	7.65^{-29}	3.47^{-25}
GKN2	–7.43767	4.53^{-16}	5.06^{-14}
C16orf89	–7.0612	3.36^{-25}	2.76^{-22}
AQP4	–6.67137	2.83^{-24}	1.62^{-21}
CCKBR	–6.22951	1.48^{-20}	3.42^{-18}
MYOC	–6.11802	1.35^{-12}	8.83^{-11}
CHGA	–6.06349	1.20^{-9}	4.24^{-8}
CPA2	–6.05318	3.16^{-14}	2.64^{-12}
ADH1B	–5.76648	2.54^{-10}	1.09^{-8}
PLCXD3	–5.75611	9.11^{-16}	9.54^{-14}
CCKAR	–5.71943	3.87^{-26}	4.41^{-23}
C7	–5.71827	1.05^{-8}	2.92^{-7}
ESRRG	–5.68657	3.51^{-15}	3.38^{-13}
SST	–5.50544	1.60^{-12}	1.03^{-10}
GHRL	–5.47991	8.11^{-16}	8.58^{-14}
PI16	–5.41744	3.03^{-11}	1.53^{-9}
KCNE2	–5.38048	5.08^{-13}	3.52^{-11}
TRIM50	–5.37981	6.14^{-20}	1.30^{-17}
SH3GL2	–5.35951	4.09^{-17}	5.63^{-15}
CKMT2	–5.32207	4.79^{-19}	8.26^{-17}
PDILT	–5.20703	2.31^{-23}	9.43^{-21}
C2orf40	–5.20268	2.80^{-12}	1.77^{-10}
ZBTB16	–5.10488	1.36^{-11}	7.38^{-10}
DNER	–5.03134	1.37^{-11}	7.40^{-10}
CKM	–4.92869	4.40^{-17}	6.02^{-15}

KAT2A	0.849841	3.09^{-7}	5.56^{-6}
SCNM1	0.84998	1.02^{-7}	2.12^{-6}
HEATR1	0.853647	4.87^{-7}	8.28^{-6}
PSMC4	0.867089	1.07^{-8}	2.94^{-7}
CCT3	0.867313	9.91^{-9}	2.78^{-7}
CFL1	0.869006	5.84^{-9}	1.76^{-7}
XPO1	0.86978	3.03^{-9}	9.73^{-8}
DCAF15	0.872207	3.48^{-8}	8.21^{-7}
PSMA4	0.873795	2.63^{-10}	1.11^{-8}
SRPK1	0.875158	2.52^{-7}	4.67^{-6}
CRLF3	0.877577	2.97^{-8}	7.16^{-7}
PATL1	0.878076	2.85^{-10}	1.19^{-8}
RAD18	0.87957	4.97^{-7}	8.40^{-6}
SF3B4	0.879611	3.72^{-9}	1.17^{-7}
TSSC1	0.883209	1.58^{-7}	3.11^{-6}
DPP3	0.884444	2.77^{-7}	5.06^{-6}
PSMA6	0.889298	1.57^{-7}	3.09^{-6}
CDC123	0.891573	4.73^{-7}	8.07^{-6}
NOP58	0.89287	2.70^{-7}	4.96^{-6}
C14orf143	0.894098	1.88^{-7}	3.63^{-6}
ILF2	0.901076	1.70^{-8}	4.40^{-7}
PSMD14	0.911838	4.67^{-10}	1.84^{-8}
SNRPA1	0.913065	1.31^{-7}	2.61^{-6}
PPIL1	0.917459	8.57^{-8}	1.80^{-6}
PIGU	0.919173	8.18^{-9}	2.36^{-7}
NOP56	0.919173	1.08^{-7}	2.21^{-6}
PALB2	0.919647	2.87^{-8}	6.97^{-7}
CSE1L	0.922674	2.49^{-7}	4.63^{-6}
PSMA3	0.924672	4.65^{-9}	1.42^{-7}
TRMT6	0.930337	1.07^{-7}	2.20^{-6}
PSMD11	0.930886	7.60^{-8}	1.62^{-6}
MKI67IP	0.930931	3.41^{-8}	8.07^{-7}
EIF4A3	0.934187	4.25^{-9}	1.32^{-7}
TH1L	0.937728	3.43^{-8}	8.11^{-7}
SNRPC	0.939637	6.14^{-8}	1.34^{-6}
STX6	0.940233	3.98^{-8}	9.22^{-7}
INTS7	0.942841	3.74^{-8}	8.74^{-7}
GRINA	0.947753	2.75^{-7}	5.03^{-6}
PUS1	0.947909	2.18^{-8}	5.43^{-7}
NUP62	0.952039	2.06^{-13}	1.54^{-11}
PSMB2	0.952743	1.18^{-10}	5.37^{-9}
RAN	0.958478	1.26^{-8}	3.40^{-7}
NUDCD1	0.959149	2.51^{-7}	4.67^{-6}
TRAF2	0.96176	4.09^{-8}	9.43^{-7}
ATIC	0.963499	8.16^{-8}	1.72^{-6}
SNRPE	0.963924	6.45^{-8}	1.40^{-6}
ZNF267	0.964184	4.83^{-7}	8.22^{-6}
PSMA7	0.966204	5.17^{-11}	2.50^{-9}
DCTPP1	0.982348	3.56^{-7}	6.31^{-6}
ERH	0.984876	4.30^{-11}	2.11^{-9}

AGXT2L1	−4.88156	5.61^{-16}	6.13^{-14}
PLP1	−4.86965	3.31^{-11}	1.66^{-9}
SLC9A4	−4.84489	8.50^{-8}	1.79^{-6}
SCARA5	−4.80725	1.67^{-9}	5.67^{-8}
CHRDL1	−4.77247	5.66^{-7}	9.37^{-6}
PEBP4	−4.75944	2.66^{-29}	1.82^{-25}
FLJ42875	−4.71013	1.02^{-10}	4.68^{-9}
ABCA8	−4.64894	1.55^{-8}	4.08^{-7}
CADM2	−4.64119	6.68^{-15}	6.20^{-13}
B3GAT1	−4.62952	1.15^{-14}	1.03^{-12}
LOC150622	−4.62596	2.29^{-16}	2.74^{-14}
LONRF2	−4.52607	1.93^{-8}	4.91^{-7}
GATA5	−4.51998	9.85^{-10}	3.59^{-8}
SCN7A	−4.50306	7.17^{-9}	2.09^{-7}
KIAA2022	−4.49187	1.00^{-10}	4.62^{-9}
GREM2	−4.49185	5.22^{-10}	2.03^{-8}
FRMD1	−4.48897	5.50^{-9}	1.67^{-7}
ABCC8	−4.48684	2.91^{-12}	1.83^{-10}
SIGLEC11	−4.48471	9.94^{-18}	1.49^{-15}
RIMS4	−4.4708	1.13^{-12}	7.50^{-11}
PDIA2	−4.4583	4.88^{-7}	8.29^{-6}
MYRIP	−4.441	5.56^{-11}	2.66^{-9}
ATP1A2	−4.42902	3.25^{-8}	7.75^{-7}
CADM3	−4.41653	8.65^{-9}	2.49^{-7}
DPT	−4.39207	1.64^{-12}	1.06^{-10}
GPR133	−4.38814	7.51^{-11}	3.51^{-9}
GRIK3	−4.38739	1.01^{-11}	5.56^{-10}
FGG	−4.32636	1.38^{-7}	2.74^{-6}
KCNJ16	−4.32612	3.84^{-7}	6.72^{-6}
HDC	−4.29099	1.80^{-15}	1.79^{-13}
NKX6-2	−4.27008	6.04^{-18}	9.33^{-16}
KLF15	−4.25568	7.23^{-12}	4.18^{-10}
TMEM132C	−4.2435	4.59^{-17}	6.24^{-15}
HIF3A	−4.23256	2.14^{-8}	5.35^{-7}
PPP1R1A	−4.22457	4.31^{-12}	2.63^{-10}
COL2A1	−4.22285	4.98^{-7}	8.41^{-8}
MYH11	−4.21973	5.29^{-7}	8.83^{-6}
C6	−4.2151	5.27^{-10}	2.04^{-8}
CUX2	−4.20223	5.54^{-12}	3.29^{-10}
ARHGDIG	−4.19856	1.48^{-11}	7.89^{-10}
PCSK2	−4.19693	4.35^{-11}	2.13^{-9}
NCAM1	−4.19173	4.39^{-10}	1.74^{-8}
PDK4	−4.18885	4.61^{-8}	1.04^{-6}
DPP10	−4.18849	1.64^{-16}	2.05^{-14}
TNXB	−4.17894	1.11^{-9}	3.97^{-8}
RPS6KA6	−4.17538	1.38^{-10}	6.17^{-9}
ZNF385B	−4.17437	1.33^{-10}	5.96^{-9}
KCNK2	−4.16451	6.15^{-10}	2.33^{-8}
AFF3	−4.16322	3.32^{-12}	2.07^{-10}
SLC5A7	−4.10935	5.41^{-16}	5.94^{-14}
WDR12	0.990652	4.59^{-9}	1.41^{-7}
RAE1	0.991562	2.63^{-10}	1.11^{-8}
FANCG	0.993228	5.61^{-7}	9.31^{-6}
TOMM40	0.995338	4.09^{-7}	7.10^{-6}
RFWD3	0.995368	1.01^{-7}	2.09^{-6}
MSH2	0.996279	3.98^{-7}	6.94^{-6}
ADRM1	0.99716	2.50^{-11}	1.29^{-9}
TUBA1B	0.999167	2.44^{-8}	6.01^{-7}

FC, fold change; FDR, false discovery rate; DEGs, differentially expressed genes; ESCC, esophageal squamous cell carcinoma.

FAM107A	–4.09094	6.39^{-12}	3.74^{-10}
MFSD4	–4.08421	2.00^{-8}	5.04^{-7}
GRIA4	–4.06891	2.32^{-15}	2.28^{-13}
SORCS1	–4.04646	2.01^{-11}	1.05^{-9}
TCEAL2	–4.04264	2.73^{-9}	8.88^{-8}
NRXN1	–4.01975	7.15^{-9}	2.09^{-7}

Table S3 *(continued)*