

Table SI. Differentially expressed mRNAs.

Gene ID	$\log_2(\text{fold change})$	P-value	Change
CORT	4.356201353	1.13×10^{-189}	Up
ANGPTL7	4.553492283	5.37×10^{-165}	Up
GPR3	4.125241447	5.04×10^{-145}	Up
DCDC2B	4.830720184	9.03×10^{-188}	Up
HEYL	4.026968712	1.99×10^{-129}	Up
HPDL	4.585158731	1.27×10^{-160}	Up
TEX38	4.468373846	7.47×10^{-254}	Up
NDC1	4.383602595	6.95×10^{-171}	Up
RPAP2	4.660416573	8.75×10^{-193}	Up
SASS6	4.401057382	1.57×10^{-150}	Up
RXFP4	6.44756544	2.70×10^{-262}	Up
MEX3A	5.508877138	8.22×10^{-155}	Up
PIGM	4.078128986	5.28×10^{-164}	Up
GPR52	4.265442998	6.10×10^{-164}	Up
OCLM	5.954941024	2.92×10^{-237}	Up
PDC	4.683001583	2.46×10^{-275}	Up
B3GALT2	4.371177353	5.64×10^{-145}	Up
ZBTB41	4.367275601	1.72×10^{-126}	Up
ZBED6	5.704675214	4.61×10^{-172}	Up
SLC45A3	5.604215318	3.62×10^{-172}	Up
AVPR1B	4.381594519	2.56×10^{-156}	Up
MAP10	4.755878572	6.83×10^{-129}	Up
CHML	5.598556456	7.38×10^{-169}	Up
TFB2M	4.029101241	5.25×10^{-147}	Up
ZNF670	4.197299093	3.85×10^{-140}	Up
MYCN	7.056117374	6.79×10^{-161}	Up
PFN4	4.686523558	1.67×10^{-228}	Up
KCNK12	4.303299306	7.28×10^{-148}	Up
GPR75	5.82508115	2.57×10^{-205}	Up
TSPYL6	4.946927465	3.73×10^{-267}	Up
ETAA1	4.218368223	3.95×10^{-133}	Up
TUBA3D	5.973646097	2.52×10^{-271}	Up
TTC30A	4.08376329	2.27×10^{-127}	Up
DYTN	4.689842342	3.16×10^{-101}	Up
FAM124B	4.32293493	1.13×10^{-126}	Up
HTR2B	4.938955422	7.21×10^{-196}	Up

KCNJ13	6.169985005	2.13×10^{-240}	Up
CROCC2	4.041230898	3.70×10^{-66}	Up
LHFPL4	4.180160323	1.17×10^{-169}	Up
MKRN2OS	6.743069001	2.17×10^{-49}	Up
TRIM71	6.583420753	1.14×10^{-132}	Up
EBLN2	4.636607323	1.68×10^{-140}	Up
HTR1F	5.398029068	1.77×10^{-98}	Up
MTRNR2L12	7.329409664	1.59×10^{-241}	Up
ZBED2	5.322982184	2.19×10^{-134}	Up
LRRC58	4.419483211	3.80×10^{-157}	Up
TRH	5.402847579	8.01×10^{-75}	Up
SLC35G2	4.567317137	2.66×10^{-157}	Up
CPA3	5.998814918	2.11×10^{-97}	Up
IGSF10	7.696473674	2.99×10^{-154}	Up
SUCNR1	5.37124582	8.05×10^{-121}	Up
P2RY1	4.545471569	1.59×10^{-117}	Up
C3orf80	6.870287486	5.48×10^{-145}	Up
FAM184B	5.638691854	2.87×10^{-285}	Up
KLB	4.951316617	9.29×10^{-214}	Up
GNRHR	4.996776334	3.51×10^{-238}	Up
PRSS12	4.296453158	1.04×10^{-125}	Up
SPATA5	4.104874527	1.57×10^{-131}	Up
MAB21L2	4.218598658	2.15×10^{-151}	Up
C4orf46	4.111235451	4.08×10^{-156}	Up
NEIL3	5.597666741	3.43×10^{-143}	Up
F2RL2	4.849957972	4.26×10^{-154}	Up
ZBED3	5.296452845	2.03×10^{-186}	Up
MBLAC2	5.28042943	7.05×10^{-170}	Up
POU5F2	5.443736323	3.89×10^{-196}	Up
TIFAB	4.498813302	3.44×10^{-66}	Up
EGR1	6.016321783	1.41×10^{-120}	Up
LRRTM2	5.235371246	3.42×10^{-210}	Up
PCDHGB2	5.009666599	1.64×10^{-126}	Up
PCDHGA5	4.151196015	8.28×10^{-123}	Up
PCDHGB3	5.611411757	5.21×10^{-190}	Up
PCDHGA6	5.13901274	1.64×10^{-151}	Up
PCDHGA7	4.110369447	3.50×10^{-124}	Up
PCDHGA8	4.524707643	6.20×10^{-172}	Up

PCDHGC5	4.520114565	9.55×10^{-153}	Up
SLC26A2	4.632094031	1.09×10^{-153}	Up
IRGM	4.598872969	7.68×10^{-134}	Up
FAM196B	4.811319735	4.20×10^{-169}	Up
MYLK4	4.430116453	6.66×10^{-142}	Up
SOX4	6.530332755	4.08×10^{-216}	Up
HIST1H4C	4.556646823	9.62×10^{-151}	Up
HIST1H4I	4.161984416	7.75×10^{-138}	Up
PGBD1	4.198728864	2.09×10^{-153}	Up
ZBTB12	4.137256395	2.38×10^{-144}	Up
SCUBE3	5.305540384	8.77×10^{-206}	Up
CENPQ	4.332826141	9.03×10^{-126}	Up
SRSF12	4.59592639	1.29×10^{-180}	Up
PM20D2	4.977558568	7.12×10^{-169}	Up
TSTD3	4.050396942	2.66×10^{-154}	Up
MFSD4B	4.81042638	1.42×10^{-206}	Up
GVQW2	4.292667883	1.97×10^{-176}	Up
CLDN20	6.100605333	1.16×10^{-262}	Up
GRIFIN	4.791546756	3.38×10^{-209}	Up
ANKRD61	5.231818709	9.43×10^{-220}	Up
TWISTNB	4.52341486	8.81×10^{-169}	Up
HOXA5	4.971817506	1.53×10^{-66}	Up
HOXA6	5.625360291	2.10×10^{-96}	Up
HOXA10	4.20438281	1.26×10^{-60}	Up
SPDYE1	4.88697072	9.87×10^{-180}	Up
SPDYE3	4.403748473	3.47×10^{-183}	Up
GPR22	4.646747288	4.23×10^{-188}	Up
OPN1SW	4.980246128	2.78×10^{-278}	Up
ZC3HAV1L	7.538725605	1.73×10^{-286}	Up
TAS2R3	4.601855263	2.27×10^{-194}	Up
TAS2R4	4.658148663	2.50×10^{-150}	Up
TAS2R5	4.608799077	3.95×10^{-158}	Up
MTRNR2L6	5.206884097	9.26×10^{-295}	Up
XRCC2	6.74294625	5.85×10^{-201}	Up
MT-ND1	4.257310477	5.14×10^{-113}	Up
MTRNR2L10	4.646437372	1.10×10^{-277}	Up
USP51	4.836716093	3.49×10^{-167}	Up
SPIN4	6.142746848	3.75×10^{-164}	Up

ZC3H12B	4.438301554	1.33×10^{-163}	Up
P2RY4	4.23780234	1.26×10^{-215}	Up
KIF4A	4.393624038	2.98×10^{-97}	Up
ERCC6L	5.422222593	7.85×10^{-183}	Up
GPR174	4.3074064	3.05×10^{-79}	Up
RPA4	4.785595003	3.52×10^{-185}	Up
RAB40A	4.117608518	9.29×10^{-162}	Up
RAB9B	4.492809319	9.08×10^{-145}	Up
TRPC5	4.536876078	4.01×10^{-232}	Up
PRSS51	4.507780008	8.81×10^{-192}	Up
CYP7B1	4.381185161	2.42×10^{-87}	Up
SLC10A5	4.528255807	2.48×10^{-183}	Up
MT-ND4	4.41232532	1.30×10^{-152}	Up
DSCC1	5.846022882	4.18×10^{-174}	Up
KCNV2	4.55875794	1.10×10^{-251}	Up
INSL6	5.656833338	2.88×10^{-283}	Up
ACER2	4.368084847	1.88×10^{-155}	Up
LRRC19	6.126585974	2.03×10^{-299}	Up
MAMDC2	6.629860308	2.13×10^{-151}	Up
OMD	5.561939204	6.08×10^{-160}	Up
ZNF367	5.092266375	4.34×10^{-165}	Up
BSPRY	4.184816666	1.84×10^{-100}	Up
STKLD1	4.838641407	1.80×10^{-206}	Up
DRD4	4.44143451	2.17×10^{-164}	Up
OR52H1	4.009471627	2.07×10^{-218}	Up
MTRNR2L8	4.788395043	7.41×10^{-128}	Up
KIF18A	5.105629537	1.13×10^{-139}	Up
ALX4	4.477277623	1.72×10^{-236}	Up
FAM180B	5.435348271	1.86×10^{-198}	Up
C1QTNF4	6.116073096	1.68×10^{-145}	Up
C11orf95	4.363481119	9.79×10^{-165}	Up
RCOR2	4.480967328	7.74×10^{-171}	Up
FLRT1	4.468966889	1.26×10^{-152}	Up
ARHGEF17	4.475330357	1.28×10^{-153}	Up
MT-ND5	4.315623211	1.32×10^{-155}	Up
PLET1	4.388820398	9.07×10^{-278}	Up
C1QL3	4.990776556	5.56×10^{-170}	Up
CASC10	6.342262071	3.28×10^{-149}	Up

TET1	5.52580944	1.19×10^{-153}	Up
PALD1	4.528183919	1.85×10^{-129}	Up
KIF11	4.983432465	1.15×10^{-141}	Up
PDE6C	4.994487568	2.16×10^{-219}	Up
LOXL4	4.194431615	2.30×10^{-129}	Up
WNT8B	4.138772367	6.10×10^{-184}	Up
NHLRC2	4.052671018	2.14×10^{-150}	Up
TRUB1	4.115788945	4.20×10^{-122}	Up
TAS2R10	4.945450023	6.22×10^{-257}	Up
TAS2R13	5.506147915	3.12×10^{-278}	Up
TAS2R14	4.540869186	1.04×10^{-143}	Up
TAS2R50	4.582156294	1.25×10^{-255}	Up
TAS2R20	4.013747438	4.88×10^{-135}	Up
TAS2R19	5.139292144	1.69×10^{-227}	Up
TAS2R31	5.236762298	5.74×10^{-230}	Up
TAS2R46	4.917763984	4.79×10^{-242}	Up
TAS2R43	4.894661906	6.56×10^{-195}	Up
TAS2R30	5.452021799	4.06×10^{-222}	Up
C12orf71	4.2563745	1.31×10^{-200}	Up
ZBTB39	4.025718498	9.03×10^{-143}	Up
UTP20	4.685480902	1.27×10^{-170}	Up
ZNF891	4.913732443	5.12×10^{-180}	Up
PABPC3	4.728310738	5.88×10^{-190}	Up
URAD	4.472672356	2.38×10^{-151}	Up
AKAP11	4.199865421	5.81×10^{-145}	Up
KCTD4	5.084363396	9.03×10^{-244}	Up
GPR180	4.352111376	4.04×10^{-149}	Up
CCDC168	4.602678888	2.90×10^{-189}	Up
CHAMP1	4.10122692	2.37×10^{-164}	Up
ZFHX2	5.033717068	2.41×10^{-182}	Up
NYNRIN	6.234663631	1.00×10^{-185}	Up
GPR135	5.980423322	2.50×10^{-221}	Up
SLC10A1	4.487805513	2.82×10^{-116}	Up
ZC2HC1C	4.222859893	6.38×10^{-174}	Up
GOLGA8H	4.9929913	6.04×10^{-153}	Up
ANKRD63	4.671721314	3.42×10^{-229}	Up
DISP2	4.703825566	6.18×10^{-185}	Up
MNS1	6.333220167	6.89×10^{-249}	Up

FBXL22	4.077480807	4.05×10^{-171}	Up
MEX3B	6.737950298	3.65×10^{-199}	Up
NPW	5.769680121	4.72×10^{-167}	Up
MTRNR2L4	4.092797999	6.43×10^{-228}	Up
C16orf96	4.288142469	5.54×10^{-150}	Up
MPV17L	4.056774688	1.13×10^{-90}	Up
ZNF629	4.262861889	6.47×10^{-185}	Up
AGRP	4.236742623	1.64×10^{-197}	Up
GAN	4.38016808	2.53×10^{-177}	Up
GSG2	4.277180791	2.41×10^{-123}	Up
ZNF594	4.808549389	1.71×10^{-149}	Up
SLC35G6	4.847823986	4.76×10^{-246}	Up
MTRNR2L1	7.452538188	1.64×10^{-227}	Up
KLHL11	5.583354609	4.94×10^{-193}	Up
HOXB5	4.405970084	5.21×10^{-68}	Up
HOXB6	4.22343999	9.85×10^{-59}	Up
NOG	4.208700369	6.97×10^{-79}	Up
MPO	5.907926976	8.10×10^{-76}	Up
NACA2	4.097907675	9.37×10^{-195}	Up
SMIM6	4.094975834	1.54×10^{-160}	Up
ZNF750	4.510651245	6.37×10^{-175}	Up
SOCS6	4.293432071	2.54×10^{-145}	Up
SOX12	4.448583072	9.98×10^{-172}	Up
CPXM1	7.907726403	1.57×10^{-183}	Up
C20orf194	4.346852147	7.52×10^{-173}	Up
GINS1	5.344677298	6.80×10^{-163}	Up
MMP24	4.311282723	6.60×10^{-189}	Up
NNAT	4.060900245	4.37×10^{-160}	Up
SPATA25	4.341778638	4.43×10^{-184}	Up
ARFGEF2	4.194054897	3.83×10^{-157}	Up
MTRNR2L3	5.296406158	2.78×10^{-291}	Up
ZNF878	4.313280743	1.90×10^{-165}	Up
SYCE2	4.275534448	1.35×10^{-167}	Up
TMEM221	4.008742858	9.42×10^{-148}	Up
ZNF253	4.214692337	1.83×10^{-143}	Up
ZNF492	4.805202152	3.49×10^{-173}	Up
ZNF681	4.736832302	5.69×10^{-141}	Up
KCNJ14	4.490213807	1.77×10^{-159}	Up

FUT2	4.700837967	3.30×10^{-167}	Up
ACPT	6.489324863	2.46×10^{-108}	Up
ZNF888	6.001647845	3.46×10^{-308}	Up
ZNF805	4.158591868	2.18×10^{-170}	Up
ZNF543	4.239418194	2.14×10^{-151}	Up
VN1R1	4.86352742	2.29×10^{-177}	Up
ZNF132	4.200107218	1.37×10^{-146}	Up
CCDC188	5.093753513	7.59×10^{-191}	Up
IGLL1	6.678343816	2.76×10^{-114}	Up
ZNF70	6.036182973	7.31×10^{-221}	Up
MN1	5.024633032	1.16×10^{-110}	Up
SLC5A4	4.435928379	3.52×10^{-136}	Up
DNAJB7	4.171732382	1.40×10^{-170}	Up
ATP5L2	4.021906691	8.94×10^{-276}	Up
RIBC2	4.320712393	8.46×10^{-121}	Up
PKDREJ	4.915597511	5.51×10^{-165}	Up
ZBED4	4.272197185	5.53×10^{-176}	Up
URB1	4.088291593	3.67×10^{-159}	Up
SLC5A3	4.437550508	2.80×10^{-122}	Up
CDA	-4.403794691	8.35×10^{-97}	Down
HIST2H4A	-4.679754854	5.26×10^{-172}	Down
HIST2H2AA	-10.26341605	1.68×10^{-250}	Down
HIST2H2AA	-9.460554942	3.30×10^{-259}	Down
HIST2H4B	-5.522448966	1.55×10^{-157}	Down
S100A9	-5.524523211	2.76×10^{-94}	Down
S100A12	-5.908172865	1.87×10^{-90}	Down
HSPA6	-7.683894895	1.39×10^{-201}	Down
G0S2	-4.76273513	2.19×10^{-55}	Down
TNFAIP6	-4.121611529	8.18×10^{-82}	Down
CXCR1	-9.673424618	3.70×10^{-240}	Down
CAMP	-5.537066888	1.09×10^{-104}	Down
S100P	-5.427589601	2.02×10^{-129}	Down
BASP1	-4.778419147	3.35×10^{-117}	Down
LY6G6F	-4.035058641	5.61×10^{-82}	Down
HSPA1A	-5.402732524	2.00×10^{-133}	Down
HSPA1B	-4.598780805	1.24×10^{-62}	Down
UPK3BL	-6.090575844	7.72×10^{-179}	Down
DEFA4	-4.815790266	1.92×10^{-58}	Down

ORM1	-7.044880471	5.62×10^{-172}	Down
CXCR5	-5.024063686	9.13×10^{-144}	Down
C10orf105	-4.535911837	1.30×10^{-86}	Down
KRT1	-5.031084756	3.93×10^{-101}	Down
HCAR2	-5.407777424	3.85×10^{-125}	Down
HCAR3	-6.724500499	2.01×10^{-161}	Down
OLFM4	-6.552618196	3.71×10^{-90}	Down
RNASE4	-4.387466499	1.75×10^{-117}	Down
HBQ1	-4.750896745	3.48×10^{-135}	Down
KCNJ2	-4.556847957	1.87×10^{-58}	Down
SRXN1	-5.473367848	1.23×10^{-169}	Down
PI3	-8.036428444	1.11×10^{-145}	Down
SLPI	-4.841345897	7.02×10^{-83}	Down
MMP9	-8.37763866	1.95×10^{-171}	Down
LRG1	-4.35024417	7.76×10^{-88}	Down
IFI30	-7.983020862	2.05×10^{-218}	Down
FFAR2	-6.860364842	6.23×10^{-156}	Down
AC002398.	-5.360075896	3.82×10^{-136}	Down
PGLYRP1	-5.835687407	6.31×10^{-162}	Down
FPR2	-5.088523812	8.70×10^{-106}	Down