

Supplementary Table 3. The top 100 up-regulated and down-regulated genes by insulin treatment along with their log2 fold change. $p \leq 0.05$.

Up-regulated genes	log2 fold change	Up-regulated genes	log2 fold change
LOC100289333	4.62	GADD45G	1.38
SNORA4	4.45	SS18L2	1.38
SERPINF2	4.13	FAM151B	1.37
MIR186	3.9	MALAT1	1.36
SNORD58A	3.79	FAM167A	1.34
SLA	3.73	ANKRD23	1.33
IL11	3.58	SERP2	1.31
DCDC2	3.39	MIR5047	1.31
HGD	3.33	MTRNR2L2	1.3
IL1B	3.05	AVIL	1.3
SNORA63	2.92	PRSS56	1.3
MAMDC2	2.91	C1orf189	1.28
PCOLCE-AS1	2.83	MIR3064	1.27
LRRC36	2.74	SAA1	1.27
SNORD2	2.56	BEND6	1.27
TRIM66	2.54	ZNF439	1.26
STMN4	2.51	PLP1	1.25
SNORD16	2.35	SLC25A33	1.24
ZNF708	2.34	GTPBP2	1.24
SNORD72	2.27	FAM171B	1.24
SOAT2	2.25	SMIM3	1.23
PCDH9	2.19	HIST1H1E	1.23
HHIPL1	2.03	CCNE2	1.23
HNRNPU-AS1	2.02	RAD51AP1	1.17
APOE	1.95	GNPNAT1	1.17
SNORA25	1.94	AOC2	1.16
KLHDC1	1.91	SYBU	1.16
EFNB3	1.88	ZNF346	1.16
BTG4	1.88	EPSTI1	1.15
ZNF799	1.85	ERCC8	1.15
CFP	1.85	CCL20	1.14
CDSN	1.83	DUSP8	1.13
SNORA72	1.78	CTH	1.13
EAF2	1.76	FAM195A	1.12
SNORA73B	1.73	DDIT3	1.11
TPPP3	1.7	PTPRU	1.1
LIME1	1.66	DDIAS	1.1
AREG	1.63	RPPH1	1.1
FAM133CP	1.62	POP5	1.1
P2RX3	1.6	DRP2	1.08
GDAP1L1	1.56	CDH8	1.08
ZNF117	1.55	CCDC137	1.07
ZNF766	1.51	PPCDC	1.07
RHBDL1	1.49	CYCSP52	1.07
CYP26A1	1.46	SLC9A5	1.06
IMPACT	1.46	MDM4	1.06
ATF3	1.45	MTHFD2P1	1.06
ANGPTL6	1.45	PSPH	1.06
ZNF329	1.38	ZNF564	1.06
AMT	1.38	MTRNR2L10	1.06

Down-regulated genes	log2 fold change	Down-regulated genes	log2 fold change
PCDHB6	-4.28	ELMOD3	-1.22
KLHL38	-3.6	SNX21	-1.22
SNX29P2	-3.29	LOXL3	-1.21
APOB	-2.99	TSPYL6	-1.21
GALNT15	-2.82	CALCOCO1	-1.2
VIM-AS1	-2.67	CD14	-1.2
RAB3B	-2.45	FAM114A1	-1.19
THBS2	-2.22	ATP13A2	-1.19
MYO5B	-2.13	CPT1A	-1.19
TIGD5	-1.84	BCKDHA	-1.18
IFIT3	-1.82	TRIB2	-1.16
DIO2	-1.75	RAB3D	-1.16
SLC25A45	-1.71	TRPM6	-1.16
PDCD4	-1.68	ASAP3	-1.15
NDUFAF3	-1.66	VASH2	-1.15
AP5B1	-1.66	MMP14	-1.14
DCP1B	-1.65	SHF	-1.13
SMAD6	-1.6	OLFM1	-1.12
TSPAN17	-1.56	ZNF358	-1.11
PDK2	-1.52	IRF7	-1.11
DYRK1B	-1.5	PNRC1	-1.11
VWA5A	-1.5	PRSS8	-1.11
KIAA1161	-1.48	VIM	-1.11
SOX15	-1.45	ATP5SL	-1.1
ITGA8	-1.4	KLHL36	-1.1
ENOX1	-1.38	PXYLP1	-1.09
CUL7	-1.37	SH2D3C	-1.08
LBH	-1.35	TCAF1	-1.08
FBXO32	-1.35	CSAD	-1.08
FAM102A	-1.33	OGFOD3	-1.07
ARHGEF19	-1.31	PDE5A	-1.06
PAX5	-1.28	GBP1	-1.05
PINK1	-1.28	TACC1	-1.04
TMIE	-1.28	PXMP4	-1.03
PTHLH	-1.27	MOV10	-1.03
LOC100653233	-1.26	FMNL3	-1.03
ADD2	-1.26	TTYH3	-1.02
AMIGO2	-1.25	CTDSP2	-1.02
FOXO4	-1.25	ALDH3A1	-1.02
FZD2	-1.25	SESN3	-1.02
MMP11	-1.24	SLC43A2	-1.02
FBXL8	-1.24	BTBD2	-1.02
BCAS3	-1.23	TNS4	-1.01
TMC4	-1.23	DCAF8L1	-1
TCF7L1	-1.23	OCIAD2	-1
ROBO1	-1.23	TKFC	-1
KATNAL2	-1.23	PTMS	-1
CHST12	-1.23	RDH10	-1
FAH	-1.23	FOXN3	-1
LDHB	-1.22	CTXN1	-0.99