

**Supplemental Table S1 Genes downregulated both in GCN5 and N-Myc KO NSC**

TargetID	Expression Control/KO GCN5	Expression Control/KO N-Myc	MUC1	6.1	5.4
CLDN11	84.2	64.9	RCN3	6.0	2.6
SLC5A4A	65.4	3.5	RGS16	5.9	45.5
LTK	54.2	10.2	PTGS1	5.7	2.1
OLFR295	54.2	2.2	PEX11C	5.7	2.0
TNFRSF5	40.7	5.4	OLFR116	5.6	17.6
H2-AB1	34.1	12.3	PSMB8	5.6	2.6
TRBV12-1	29.1	3.1	CHST3	5.4	3.8
DSCR1L1	27.5	42.8	HTR3A	5.3	26.6
DEFCR-RS7	27.0	4.2	ABCC12	5.2	2.3
SULF1	26.4	30.4	PIK3CD	5.2	14.2
DBX2	26.4	50.0	GSTT1	5.1	29.4
VAX2	22.2	2.6	OLFR1307	5.0	227.0
PROM1	22.0	6.0	MOV10	4.9	4.5
OLFR738	22.0	3.4	AI790298	4.9	2.3
SHOX2	20.9	5.1	CAR14	4.8	7.2
GRIFIN	20.2	10.2	TRPC2	4.7	2.1
SCL0326621.17	20.2	2.2	IGHV2S4	4.7	3.6
IGFBPL1	18.4	4.0	PGBD5	4.6	4.4
DNASE2A	15.9	3.4	LIPH	4.5	3.2
MFAP4	14.8	5.9	OCM	4.4	2.1
ITIH3	14.6	158.2	LCN2	4.4	61.9
MYOM3	14.4	22.8	FOXL2	4.4	3.2
COL9A1	13.5	3.8	IL3RA	4.4	2.3
DDX4	13.1	4.7	JUNB	4.4	8.2
AI450948	12.4	2.9	FV4	4.3	8.4
TM4SF11	11.4	4.3	AI451557	4.3	4.4
STXBP2	11.2	6.5	PAM	4.3	270.6
EMP1	10.3	66.8	ADCYAP1	4.3	2.5
HOXA7	10.0	2.3	RHCG	4.2	3.4
TLR5	9.9	38.8	MYL9	4.2	162.9
ZC3HAV1	9.7	3.5	AI450757	4.1	6.5
CCR4	9.4	3.4	GADD45G	4.1	6.3
TRPM8	8.9	2.1	HES5	4.1	10.5
MATN4	8.9	2.3	CSNK2B	4.1	2.4
SLFN10	8.9	2.5	HOOK2	4.1	8.8
PCDHB9	8.7	50.2	BCL11A	4.1	1739.3
I830077J02RIK	8.3	5.0	KLK15	4.0	2.0
CYBRD1	8.2	4.8	GCAP14	4.0	2.6
ARPM1	7.4	2.0	SPATA13	4.0	30.4
STAC2	7.3	2.4	NID1	4.0	2.6
MKRN1-PS1	6.9	4.3	STX11	3.9	7.9
STK32A	6.7	8.2	TIMP1	3.9	5.2
FBLN2	6.4	2.0	GABABRP	3.9	4.2
IGHV3S2	6.4	2.0	SCL000625.1_4	3.9	15.7
ITGA2B	6.2	2.1	AB023957	3.9	8.2
MEIG1	6.2	20.0	IGFBP5	3.9	20.2
			AI427122	3.9	2.8
			ANXA9	3.9	

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DNCL2B	3.9	4.3	POLYDOM	2.9	2.3
OCIL	3.8	9.1	SLP	2.9	95.0
SLC14A2	3.7	11.5	MEF2B	2.9	4.2
RHPN2	3.7	3.3	CEECAM1	2.9	2.5
RNASE1	3.6	16.9	FCRL3	2.9	5.4
PLEKHA2	3.6	2.3	PLCD3	2.9	3.5
TGIF	3.6	2.4	PLSCR4	2.9	3.4
MTDNA_ND6	3.6	2.1	H2-T10	2.8	2.3
LENEP	3.6	8.6	INSL6	2.8	3.1
AKAP3	3.5	3.4	SEC1	2.8	7.6
EVC2	3.5	2.3	HDAC11	2.8	23.4
CML4	3.4	145.0	SCL000648.1_30	2.7	2.7
FGL2	3.4	2.6	KDT1	2.7	6.0
TLR2	3.4	2.3	ADFP	2.7	6.4
MJD	3.4	2.5	APOC4	2.7	8.4
IGF2BP3	3.4	12.7	CEP2	2.7	6.2
MGLL	3.4	12.3	HEPH	2.7	8.2
CD109	3.4	12.6	LOC230872	2.7	7.7
SPIRE2	3.4	5.5	DLEU2	2.6	2.4
LGALS9	3.3	3.4	GJA9	2.6	4.1
MMP23	3.3	3.6	EPB4.1L4A	2.6	5.1
FLI1	3.3	3.9	IGTP	2.5	20.7
AA175286	3.3	11.3	CARD10	2.5	3.3
PLCD1	3.3	4.6	CAPON-PENDING	2.5	2.7
SLC7A4	3.3	17.0	THBS3	2.5	3.8
MFNG	3.2	3.9	MVD	2.5	2.2
ACTG1	3.2	5.7	PPAP2C	2.4	8.9
TULP2	3.2	3.6	IGF1	2.4	12.2
PDLIM1	3.2	2.9	ADAMTS4	2.4	5.6
ADAMTS19	3.2	4.6	FBXO36	2.4	4.1
DHRS6	3.1	18.8	COL6A2	2.4	2.6
S100A13	3.1	4.9	SCL0002975.1_346	2.4	2.2
GUCY1B2	3.1	14.0	SCL0001356.1_58	2.4	2.5
AA409316	3.1	12.7	ADAMTS15	2.4	3.3
ZFP319	3.1	2.1	ZFP352	2.4	4.5
PRG2	3.1	2.1	CSH1	2.4	2.0
HOXB7	3.1	2.4	GNG11	2.4	2.7
MSX2	3.1	2.6	RIBC1	2.4	2.2
ENPP2	3.1	4.0	FBXO32	2.4	6.0
COL6A1	3.1	30.0	RESP18	2.3	3.7
RAB5A	3.0	3.4	NOL3	2.3	3.8
SPARC	3.0	8.3	ITGB8	2.3	5.1
RMCS1	3.0	18.0	CD24A	2.3	2.8
SCL0002976.1_36	3.0	2.9	SOCS3	2.3	9.3
IRF5	3.0	2.6	OPRL	2.3	4.5
V1RB4	2.9	2.7	BZRPL1	2.3	3.2
CD9	2.9	3.5	YM24D07	2.3	3.0
OLFR139	2.9	2.1	DLL1	2.3	2.8
HFE	2.9	4.0	PARD6A	2.3	2.7

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SCL0002711.1_76	2.3	7.8
KHK	2.3	4.4
OTX1	2.3	2.6
OLFR624	2.3	2.5
RDH5	2.3	8.0
SCL000048.1_50	2.2	2.9
FHOD1	2.2	4.2
SHRM	2.2	4.6
CYP4V3	2.2	19.8
GPR133	2.2	3.7
BCL2L11	2.2	2.5
ELA1	2.2	3.7
FBXL8	2.2	4.0
RAB17	2.2	3.5
EPHA2	2.2	39.6
CSRP3	2.2	3.1
PCDH15	2.2	5.7
NTE	2.2	3.5
MAST1	2.2	2.7
SCL0004060.1_43	2.2	3.5
PADI2	2.2	23.2
OLFR100	2.2	7.1
LOC432611	2.1	3.5
DNAJC12	2.1	3.6
FETUB	2.1	6.4
LPXN	2.1	2.4
KCNJ10	2.1	5.9
EMP2	2.1	6.0
SPIB	2.1	3.9
RHOU	2.1	3.9
TNFRSF4	2.1	7.2
IRF1	2.1	2.5
MSRB	2.1	4.3
RAB3D	2.1	2.9
GATA2	2.1	4.4
DIRAS1	2.1	3.0
GPR30	2.1	3.6
IRX1	2.0	59.9
MCF2L	2.0	2.6
H2-L	2.0	2.4
SCL000723.1_11	2.0	3.6
MYD88	2.0	8.2
SCL0003943.1_25	2.0	3.7
MAP3K8	2.0	9.6