

Supplemental Tables 1 and 2. Genes whose up- or down regulation best correlates with NeuroD1 expression with a correlation p-value of 0.001.

Tables of genes from microarray that correlate with NeuroD1 expression with P value of 0.001.

Table 1 lists up-regulated genes. Table 2 lists down-regulated genes.

Supplemental Figures

Figure 1. Expression in melanoma with mutant p53 and luciferase assays.

a) Melanoma cells were lysed and immunoblotted for TrkB, synaptophysin NeuroD1 and GAPDH was loading the control. b) HBEC3-KT and HBEC3-KT53 were transfected with a pGL3-NeuroD1-luciferase construct and luciferase activity was measured.

Figure 2. NeuroD1 and TrkB knockdown for Brdu

a) NeuroD1 was transiently knocked down in prostate and melanoma cell lines. Lysates were immunoblotted for NeuroD1, TrkB and GAPDH (as loading control). b) NeuroD1 and TrkB were transiently knocked down in melanoma or prostate cells in 96 well format for 3 days. Cell were then assayed for BrDu incorporation.

Figure 3. Chromatin Immunoprecipitation (ChIP) of NeuroD1 in melanoma and prostate cells

a) ChIP of NeuroD1 on *NTRK2* promoter in melanoma and prostate cell lines. Two E-boxes sites examined at -292 and -337. IgG and NeuroD1 immunoprecipitations values were compared to input, then plotted as % chromatin fold enrichment.

Figure 4. TrkB knockdown

TrkB was transiently knocked down in melanoma or prostate cells for 3 days. Lysates were immunoblotted for TrkB and GAPDH (as loading control).

Supplemental Table 1

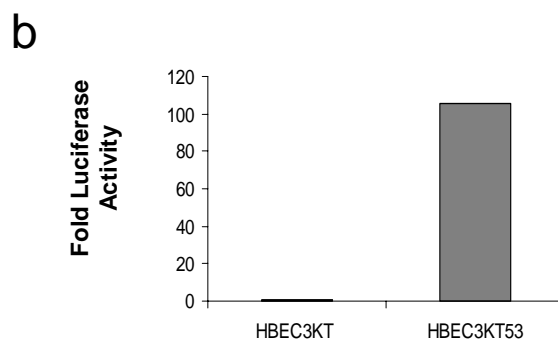
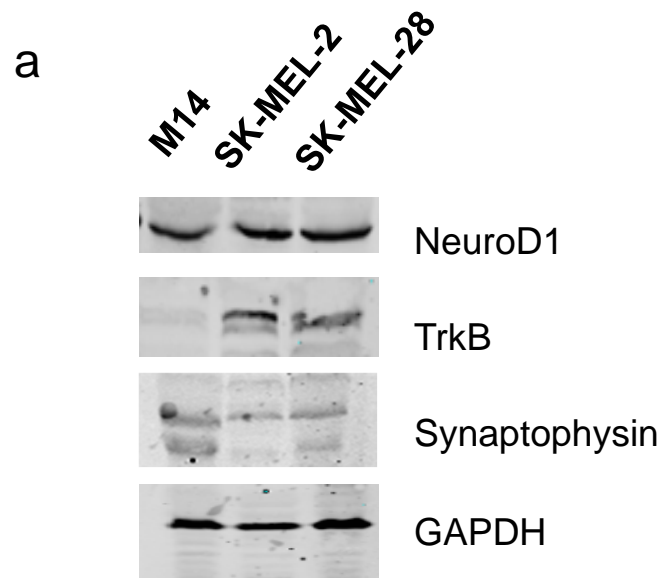
Genes up-regulated along with NeuroD1

Affy ID	Accession	Unigene Build 219	UCSC Cytoband	High Neuro D1 vs Low Neuro D1	T-test	20 significant	Gene Name	Symbol
206282_at	NM_002500	Hs.709709	2q31.3	4.36	0.000	U	Neurogenic differentiation 1	NEUROD1
228915_at	NM_080760	Hs.129452	13q21.33	3.28	0.000	U	Dachshund homolog 1 (Drosophila)	DACH1
213847_at	NM_006262	Hs.37044	12q13.12	3.97	0.002	U	Peripherin	PRPH
218625_at	NM_016588	Hs.103291	6p25.1	2.17	0.003	U	Neuritin 1	NRN1
212764_at	NM_001128128	Hs.124503	10p11.22	1.49	0.002	U	Zinc finger E-box binding homeobox 1	ZEB1
207144_s_at	NM_004143	Hs.40403	Xq13.1	1.98	0.000	U	Cbp/p300-interacting transactivator, with Glu/Asp-rich carboxy-terminal domain, 1	CITED1
213200_at	NM_003179	Hs.632804	Xp11.23	1.65	0.001	U	Synaptophysin	SYP
221914_at	NM_133499	Hs.225936	Xp11.23	1.74	0.000	U	Synapsin I	SYN1
212843_at	NM_181351	Hs.503878	11q23.2	1.04	0.017	U	Neural cell adhesion molecule 1	NCAM1
204584_at	NM_001143963	Hs.522818	Xq28	2.82	0.001	U	L1 cell adhesion molecule	L1CAM
204697_s_at	NM_001275	Hs.150793	14q32.12	2.41	0.000	U	Chromogranin A (parathyroid secretory protein 1)	CHGA
204260_at	NM_001819	Hs.516874	20p12.3	1.93	0.000	U	Chromogranin B (secretogranin 1)	CHGB
204681_s_at	NM_012294	Hs.174768	7p15.3	2.32	0.001	U	Rap guanine nucleotide exchange factor (GEF) 5	RAPGEF5
206502_s_at	NM_002196	Hs.89584	20p11.23	1.25	0.001	U	Insulinoma-associated 1	INSM1

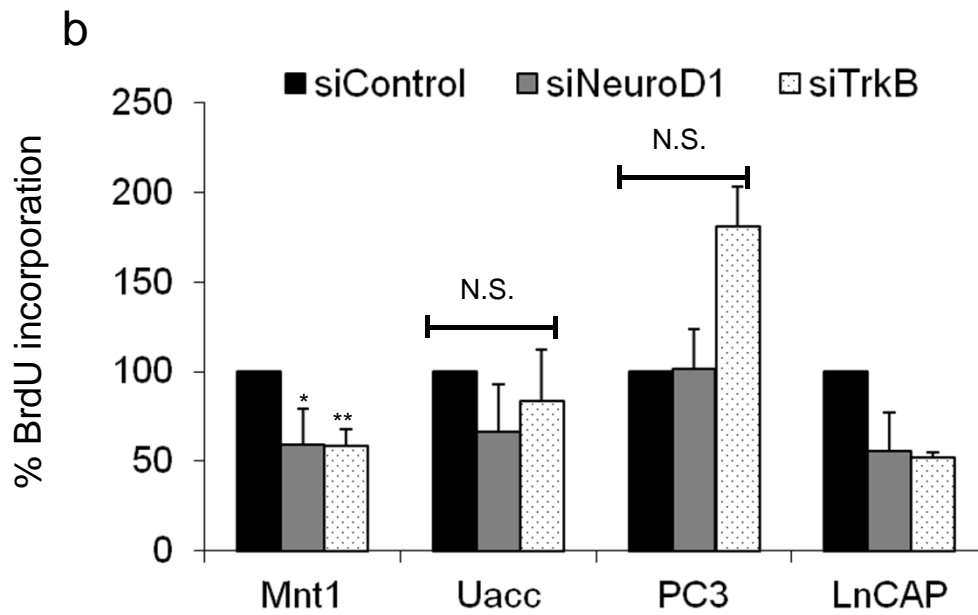
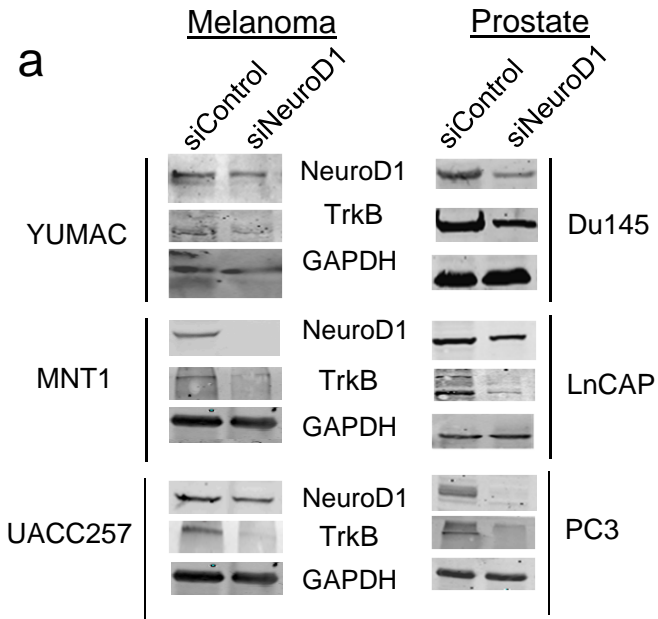
Supplemental Table 2 Genes down-regulated with NeuroD1

201131_s_at	NM_004360	Hs.461086	16q22.1	-4.37	0.001	D	Cadherin 1, type 1, E-cadherin (epithelial)	CDH1
208712_at	NM_053056	Hs.523852	11q13.3	-2.19	0.127		Cyclin D1	CCND1
201005_at	NM_001769	Hs.114286	12p13.31	-3.29	0.006	D	CD9 molecule	CD9
209835_x_at	NM_001001392	Hs.502328	11p13	-2.99	0.010	D	CD44 molecule (Indian blood group)	CD44
207606_s_at	NM_018287	Hs.499264	10p11.22	-1.25	0.003	D	Rho GTPase activating protein 12	ARHGAP12
205016_at	NM_003236	Hs.170009	2p13.3	-2.16	0.011	D	Transforming growth factor, alpha	TGFA
201506_at	NM_000358	Hs.369397	5q31.1	-5.40	0.002	D	Transforming growth factor, beta-induced, 68kDa	TGFBI
202431_s_at	NM_002467	Hs.202453	8q24.21	2.49	0.368	D	v-myc myelocytomatosis viral oncogene homolog (avian)	MYC
209757_s_at	NM_005378	Hs.25960	2p24.3	-2.48	0.694	D	V-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian)	MYCN
214058_at	NM_001033082	Hs.437922	1p34.2	-2.66	0.727	D	V-myc myelocytomatosis viral oncogene homolog 1, lung carcinoma derived (avian)	MYCL1

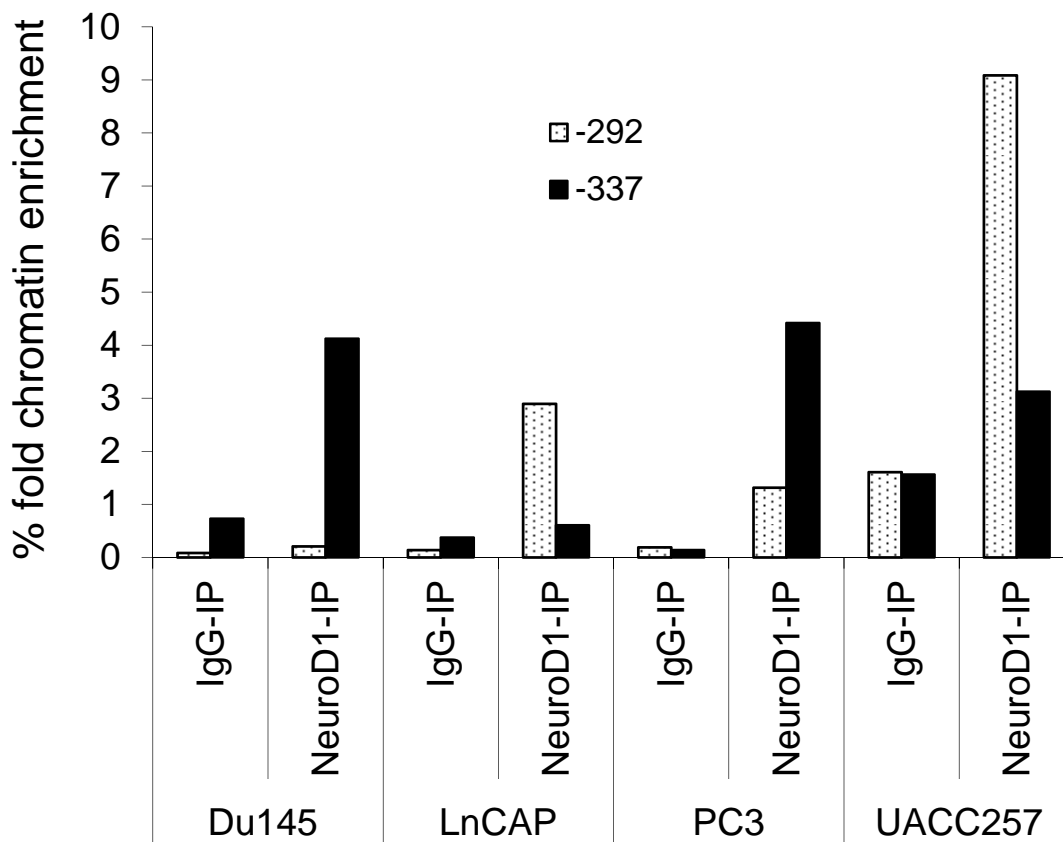
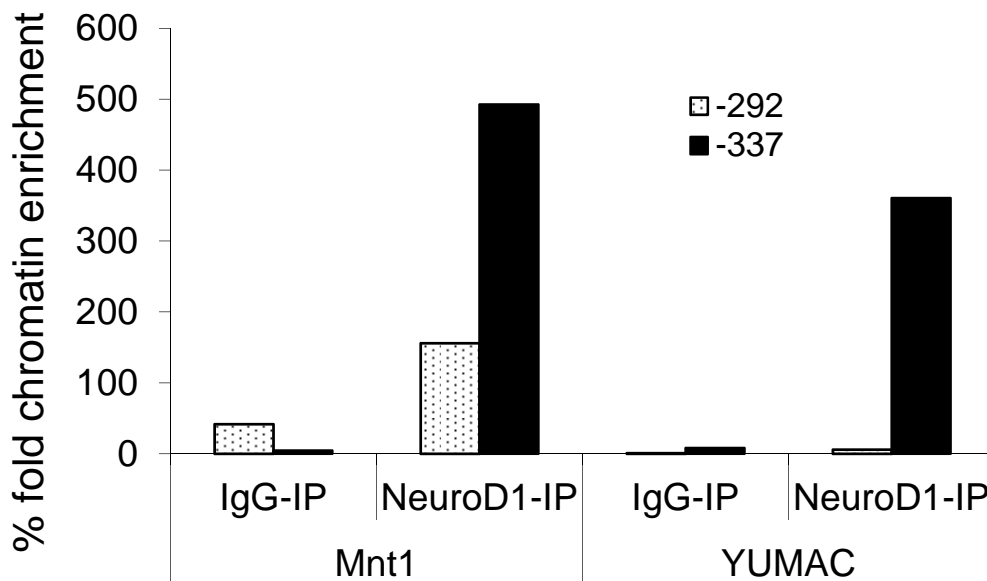
Supplemental 1



Supplemental 2



Supplemental 3



Supplemental 4

