



**Supplementary Fig. S1. Gene expression profiling of early NURR1 gene targets.** (A) Northern blot analysis shows *NURR1* mRNA expression in transfected hNSC lines 7 days after transduction with a virus encoding pLPCX (-) or pLPCX-*NURR1* (+). (B) Genes exhibiting the greatest magnitude of change under Nurr1 overexpression in A4, F3, and F5. Right bars indicate gene activation; left bars indicate repression.

**Supplementary Table S1.** Expression profiling of DA-associated genes cited by literatures in hNSC lines

GeneTitle	Alias	GenBank Accession No.	Raw Affymetrix signal		
			F3	A4	F5
Class III $\beta$ -tubulin	TuJ1	NM_006086.3	9736.1	18665.6	13215.6
Cadherin-associated protein, beta 1	$\beta$ -catenin	NM_003798.3	4633.7	7683.4	6631.3
Aldehyde dehydrogenase 2 family	Ahd2	NM_000690.3	5617.6	1593.4	2674.3
Tenascin C	TNC	NM_002160.3	2664.9	2834.4	3332.5
Nestin	Nestin	NM_024609.1	1031.5	236.2	5366.1
Syndecan 2	SDC2	NM_002998.3	863.8	1423.7	1613.2
Wingless-type MMTV integration site family, member 5A	Wnt5a	NM_003392.4	626.4	384.1	907.6
Brain-derived neurotrophic factor	BDNF	NM_001709.4	256	320.2	67
Solute carrier family 6, member 3	DAT	NM_001044.4	145.0	97.2	234.8
Cyclin-dependent kinase inhibitor 1C	p57(Kip2)	NM_000076.2	88.8	44.4	137.3
Forkhead box A2	FOXA2	NM_021784.4	97.3	4.4	91.2
NR4A2	Nurr1	NM_006186.3	64.5	127.2	68.7
GDNF family receptor alpha 1	GDNFR	NM_005264.4	707.4	25.5	36.4
Ret proto-oncogene	Ret	NM_020975.4	66.8	25.4	41.1
NEFL	NFL	NM_006158.4	193.4	38.5	13.4
Solute carrier family 18, member 2	VMAT2	NM_003054.4	152.4	2.7	7.9
Othodenticle homeobox 2	OTX2	NM_021728.3	39.5	21.4	40.5
Wingless-type MMTV integration site family, member 3	Wnt3	NM_030753.4	13.4	51.1	33.6
Engrailed1	En1	NM_001426.3	41.8	38.4	6
Tyrosine hydroxylase	TH	NM_199292.2	43.4	21.1	21.5
Glial cell derived neurotrophic factor	GDNF	NM_000514.3	58.1	6.7	13
ATP-binding cassette, sub-family G, member 2	ABCG2	NM_004827.2	24.8	36.9	9.2
Paired-like homeodomain 3	Ptx3	NM_005029.3	37.2	12.4	17.4
Wingless-type MMTV integration site family, member 1	Wnt1	NM_005430.3	10.7	9	34.1
Forkhead box A1	FOXA1	NM_004496.3	4.2	41.6	3.8
LIM homeobox transcription factor 1, beta	Lmx1b	NM_002316.3	9.5	19.9	9.6
Deleted in colorectal carcinoma	DCC	NM_005215.3	13.5	19.8	4.3
Glial fibrillary acidic protein	GFAP	NM_002055.4	10.7	1.9	19.7
Vasoactive intestinal peptide	VIP	NM_003381.3	4.7	2.6	10.8

Supplementary Table S2.

F5(base) vs F5-Nur2_Signal Log Ratio	A4(base) vs A4-Nur2_Signal Log Ratio	F3(base) vs F3-Nur2_Signal Log Ratio	Probe Set ID	Representative Public ID	Gene Title	Gene Symbol
0.3	1.1	-0.8	202363_at	AF231124	testican-1	testican-1
-0.2	0.5	-0.5	201000_at	NM_001605	alanyl-tRNA synthetase	AARS
0.5	3.2	0.4	200974_at	NM_001613	actin, alpha 2, smooth muscle, aorta	ACTA2
-0.9	0.8	-0.4	200982_s_at	NM_001155	annexin A6	ANXA6
-0.3	-0.9	-0.4	218115_at	NM_018154	ASF1 anti-silencing function 1 homolog B (S. cerevisiae)	ASF1B
1.3	1	1.1	218899_s_at	NM_024812	brain and acute leukemia, cytoplasmic	BAALC
-0.4	1	-0.3	202121_s_at	NM_014453	putative breast adenocarcinoma marker (32kD)	BC-2
-0.2	0.7	-0.4	203773_x_at	NM_000712	biliverdin reductase A	BLVRA
-0.3	-0.4	-0.4	202444_s_at	NM_006459	chromosome 10 open reading frame 69	C10orf69
-0.5	1.8	0.4	218298_s_at	NM_024952	chromosome 14 open reading frame 159	C14orf159
-2.1	1.2	0.7	219837_s_at	NM_018659	cytokine-like protein C17	C17
0.3	-0.6	-0.4	224376_s_at	AF274948	chromosome 20 open reading frame 24 /// chromosome 20 open reading frame 24	C20orf24
-0.4	0.4	0.5	212406_s_at	AB028973	chromosome 20 open reading frame 36	C20orf36
0.5	-0.6	-0.5	225788_at	AF161371	chromosome 6 open reading frame 153	C6orf153
0.5	2.3	1.6	204480_s_at	NM_024112	chromosome 9 open reading frame 16	C9orf16
1	0.9	1.2	218309_at	NM_018584	calcium/calmodulin-dependent protein kinase II	CaMKIIalpha
-0.3	1.2	0.4	201432_at	NM_001752	catalase	CAT
0.4	-0.8	-0.5	203324_s_at	NM_001233	caveolin 2	CAV2
-0.5	0.9	0.9	221427_s_at	NM_030937	cyclin L2 /// cyclin L2	CCNL2
-0.5	1.5	-0.7	201005_at	NM_001769	CD9 antigen (p24)	CD9
-0.7	2.1	0.9	209395_at	M80927	chitinase 3-like 1 (cartilage glycoprotein-39)	CHI3L1
-0.5	2.2	0.9	209396_s_at	M80927	chitinase 3-like 1 (cartilage glycoprotein-39)	CHI3L1
0.6	2.4	1.6	203951_at	NM_001299	calponin 1, basic, smooth muscle	CNN1
-0.4	5.2	-0.7	37892_at	J04177	collagen, type XI, alpha 1	COL11A1
-1.3	2	1.4	211161_s_at	AF130082	collagen, type III, alpha 1 (Ehlers-Danlos syndrome type IV, autosomal dominant)	COL3A1
-0.6	0.5	-0.8	221730_at	NM_000393	collagen, type V, alpha 2	COL5A2
0.4	0.7	-1.1	201438_at	NM_004369	collagen, type VI, alpha 3	COL6A3
-0.3	1	0.9	221019_s_at	NM_030781	collectin sub-family member 12 /// collectin sub-family member 12	COLEC12
-0.3	1.9	1.2	201117_s_at	NM_001873	carboxypeptidase E	CPE
-0.7	1	0.5	204920_at	AF154830	carbamoyl-phosphate synthetase 1, mitochondrial	CPS1
0.5	1.6	0.6	215785_s_at	AL161999	cytoplasmic FMR1 interacting protein 2	CYFIP2
-0.5	1	-0.5	202802_at	NM_001930	deoxyhypusine synthase	DHPS
-0.2	1	0.7	218285_s_at	NM_020139	dehydrogenase/reductase (SDR family) member 6	DHRS6
0.4	-0.3	-0.3	200666_s_at	NM_006145	DnaJ (Hsp40) homolog, subfamily B, member 1	DNAJB1
-1.1	1.8	0.4	218976_at	NM_021800	DnaJ (Hsp40) homolog, subfamily C, member 12	DNAJC12
-0.3	-0.4	0.8	205003_at	NM_014705	dedicator of cytokinesis 4	DOCK4
0.5	-0.7	-0.8	216835_s_at	AF035299	docking protein 1, 62kDa (downstream of tyrosine kinase 1)	DOK1
0.5	1	0.9	201431_s_at	NM_001387	dihydropyrimidinase-like 3	DPYSL3
0.7	-0.9	-0.8	208370_s_at	NM_004414	Down syndrome critical region gene 1	DSCR1
-1.4	-1.1	-0.6	200606_at	NM_004415	desmoplakin	DSP
-0.7	1.2	0.3	215016_x_at	BC004912	dystonin	DST
-1.6	0.8	-0.4	206071_s_at	NM_005233	EphA3	EPHA3
-0.6	1.3	-1	202017_at	NM_000120	epoxide hydrolase 1, microsomal (xenobiotic)	EPHX1
0.4	-0.4	-0.4	218695_at	NM_019037	exosome component 4	EXOSC4
-0.3	1.8	0.2	203420_at	NM_016255	family with sequence similarity 8, member A1	FAM8A1
-0.6	1.5	0.8	225327_at	AB037791	hypothetical protein FLJ10980	FLJ10980
-0.5	2.5	-1	225817_at	AB051536	paracingulin	FLJ14957
-0.4	-0.5	-0.5	1563111_a_at	AK000529	hypothetical protein FLJ20522	FLJ20522
0.3	0.9	-0.3	200859_x_at	NM_001456	filamin A, alpha (actin binding protein 280)	FLNA
0.4	-0.9	0.4	207876_s_at	NM_001458	filamin C, gamma (actin binding protein 280)	FLNC
1.9	0.3	3.5	204359_at	NM_013231	fibronectin leucine rich transmembrane protein 2	FLRT2
0.5	2.2	-0.9	203706_s_at	NM_003507	frizzled homolog 7 (Drosophila)	FZD7
-1.1	-0.9	-1.2	213524_s_at	NM_015714	putative lymphocyte G0/G1 switch gene	G0S2
-1.7	4.2	0.5	202748_at	NM_004120	guanylate binding protein 2, interferon-inducible	GBP2
1	-1.5	0.4	203159_at	NM_014905	glutaminase	GLS

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-0.9	1.8	-0.4	204984_at	NM_001448	glypican 4	GPC4
-1.5	1	0.3	201141_at	NM_002510	glycoprotein (transmembrane) nmb	GPNCMB
-0.3	1.1	-0.5	208336_s_at	NM_004868	glycoprotein, synaptic 2	GPSN2
-1.2	-2	0.3	218469_at	NM_013372	gremlin 1 homolog, cysteine knot superfamily (Xenopus laevis)	GREM1
-0.2	1.2	0.8	201036_s_at	NM_005327	L-3-hydroxyacyl-Coenzyme A dehydrogenase, short chain	HADHSC
0.4	-0.6	-0.5	203974_at	NM_012080	haloacid dehalogenase-like hydrolase domain containing 1A	HDHD1A
0.5	1.4	0.8	221582_at	BC001193	histone 3, H2a	HIST3H2A
-1.5	2.1	-0.4	209581_at	BC001387	HRAS-like suppressor 3	HRASLS3
0.4	-1.2	-0.4	221597_s_at	BC003080	HSPC171 protein	HSPC171
-0.8	2.2	0.5	1555564_a_at	BC020718	I factor (complement)	IF
-0.6	2.7	0.5	203854_at	NM_000204	I factor (complement)	IF
-2	1.8	-0.5	201601_x_at	NM_003641	interferon induced transmembrane protein 1 (9-27)	IFITM1
2.2	-5.1	0.7	206924_at	NM_000641	interleukin 11	IL11
1.4	-0.7	0.5	204465_s_at	NM_004692	internexin neuronal intermediate filament protein, alpha	INA
0.4	1.7	-0.4	204686_at	NM_005544	insulin receptor substrate 1	IRS1
-0.3	-0.7	-0.5	206245_s_at	NM_006469	influenza virus NS1A binding protein	IVNS1ABP
0.5	-0.5	0.3	201466_s_at	NM_002228	v-jun sarcoma virus 17 oncogene homolog (avian)	JUN
0.2	-0.5	-0.7	200700_s_at	NM_006854	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 2	KDELRL2
-0.5	0.9	0.3	203494_s_at	NM_014679	translokain	KIAA0092
0.8	3.2	0.8	212805_at	AB002365	KIAA0367	KIAA0367
-0.5	0.8	0.3	212675_s_at	AB011154	KIAA0582	KIAA0582
-0.6	0.9	-0.4	212314_at	AB018289	KIAA0746 protein	KIAA0746
-0.2	0.9	-0.4	200897_s_at	NM_016081	palladin	KIAA0092
-0.9	1.2	0.5	226747_at	AB037765	KIAA1344	KIAA1344
-0.6	0.8	0.6	226098_at	AB037795	KIAA1374 protein	KIAA1374
-0.3	0.8	0.6	202020_s_at	NM_006055	LanC lantibiotic synthetase component C-like 1 (bacterial)	LANCL1
-0.4	0.4	-0.5	218717_s_at	NM_018192	leprecan-like 1	LEPREL1
-0.6	1.3	0.3	200923_at	NM_005567	lectin, galactoside-binding, soluble, 3 binding protein	LGALS3BP
0.3	1.6	-1.1	219181_at	NM_006033	lipase, endothelial	LIPG
-1	0.6	-0.6	200706_s_at	NM_004862	lipopolysaccharide-induced TNF factor	LITAF
-0.6	0.9	-0.6	200704_at	AB034747	lipopolysaccharide-induced TNF factor	LITAF
-0.3	0.6	0.3	204538_x_at	NM_006985	hypothetical protein LOC339047 /// nuclear pore complex interacting protein	LOC339047 /// NPIP
0.5	-0.5	-1.3	220014_at	NM_016644	mesenchymal stem cell protein DSC54	LOC51334
-0.9	-0.6	0.3	205282_at	NM_004631	low density lipoprotein receptor-related protein 8, apolipoprotein e receptor	LRP8
0.8	1.6	0.8	205381_at	NM_005824	leucine rich repeat containing 17	LRRC17
1.5	-0.6	0.5	223690_at	AF113211	latent transforming growth factor beta binding protein 2	LTBP2
0.6	2.2	1	219922_s_at	NM_021070	latent transforming growth factor beta binding protein 3	LTBP3
-1.3	1.3	1.4	201744_s_at	NM_002345	lumican	LUM
-0.4	1.1	-0.6	202145_at	NM_002346	lymphocyte antigen 6 complex, locus E	LY6E
0.3	0.7	-0.4	223313_s_at	BC001207	melanoma antigen, family D, 4	MAGED4
-0.6	0.9	0.4	203668_at	NM_006715	mannosidase, alpha, class 2C, member 1	MAN2C1
-0.1	-1	-0.4	222962_s_at	AB042719	MCM10 minichromosome maintenance deficient 10 (S. cerevisiae)	MCM10
-0.4	-0.3	-0.2	202107_s_at	NM_004526	MCM2 minichromosome maintenance deficient 2, mitotin (S. cerevisiae)	MCM2
-0.3	-0.5	-0.3	210983_s_at	AF279900	MCM7 minichromosome maintenance deficient 7 (S. cerevisiae)	MCM7
-0.3	1.2	-0.4	204168_at	NM_002413	microsomal glutathione S-transferase 2	MGST2
1.4	-3.8	1.7	1552489_s_at	NM_033066	membrane protein, palmitoylated 4 (MAGUK p55 subfamily member 4)	MPP4
0.4	-0.6	0.5	223154_at	AF212225	mitochondrial ribosomal protein L1	MRPL1
0.8	-1.3	1.1	205932_s_at	NM_002448	msh homeo box homolog 1 (Drosophila)	MSX1
0.3	0.9	0.4	1553588_at	NM_173710	NADH dehydrogenase 3 (MTND3)	MTND3
1.2	0.7	0.8	202555_s_at	NM_005965	myosin, light polypeptide kinase	MYLK
1.9	-2	0.8	204823_at	NM_014903	neuron navigator 3	NAV3
-1	4	2.8	203413_at	NM_006159	NEL-like 2 (chicken)	NELL2
0.4	-0.7	-0.9	217150_s_at	S73854	neurofibromin 2 (bilateral acoustic neuroma)	NF2
1.2	1.5	1.6	206023_at	NM_006681	neuromedin U	NMU
-0.7	1.2	-0.7	202238_s_at	NM_006169	nicotinamide N-methyltransferase	NNMT
-0.6	1.3	-0.5	202237_at	NM_006169	nicotinamide N-methyltransferase	NNMT

BMCC1/P  
RUNE2

0.4	-0.3	0.4	200875_s_at	NM_006392	nucleolar protein 5A (56kDa with KKE/D repeat)	NOL5A
-0.3	0.8	0.9	204791_at	NM_003297	nuclear receptor subfamily 2, group C, member 1	NR2C1
5.2	6.3	6.1	216248_s_at	S77154	nuclear receptor subfamily 4, group A, member 2	<b>NR4A2</b>
5	6.6	5.9	204622_x_at	NM_006186	nuclear receptor subfamily 4, group A, member 2	<b>NR4A2</b>
-0.4	0.8	1.1	218625_at	NM_016588	neuritin 1	NRN1
1.7	-2	0.3	203939_at	NM_002526	5'-nucleotidase, ecto (CD73)	NT5E
-0.3	0.9	0.3	200747_s_at	NM_006185	nuclear mitotic apparatus protein 1	NUMA1
0.5	0.6	-0.8	219489_s_at	NM_017821	nucleoredoxin	NXN
1.2	-1.8	-0.3	231867_at	AB032953	odz, odd Oz/ten-m homolog 2 (Drosophila)	ODZ2
-0.4	0.6	-0.5	219073_s_at	NM_017784	oxysterol binding protein-like 10	OSBPL10
-0.4	1	0.4	208158_s_at	NM_018030	oxysterol binding protein-like 1A /// oxysterol binding protein-like 1A	OSBPL1A
-0.9	-0.3	-0.3	202290_at	NM_014891	PDGFA associated protein 1	PDAP1
-0.7	0.8	0.3	204873_at	NM_000466	peroxisome biogenesis factor 1	PEX1
0.4	0.5	0.3	210908_s_at	AB055804	prefoldin 5	PFDN5
0.4	0.6	0.3	207132_x_at	NM_002624	prefoldin 5	PFDN5
-0.4	0.9	-1	201397_at	NM_006623	phosphoglycerate dehydrogenase	PHGDH
0.6	-1.1	0.5	217999_s_at	NM_007350	pleckstrin homology-like domain, family A, member 1	PHLDA1
0.6	-0.7	0.9	219155_at	NM_012417	phosphatidylinositol transfer protein, cytoplasmic 1	PITPNC1
-0.8	2.1	-1	205112_at	NM_016341	phospholipase C, epsilon 1	PLCE1
-0.4	0.7	0.4	220952_s_at	NM_019012	pleckstrin homology domain containing, family A member 5	PLEKHA5
-0.3	0.9	-0.5	219566_at	NM_024310	pleckstrin homology domain containing, family F (with FYVE domain) member 1	PLEKHF1
-0.4	-0.6	-0.4	218009_s_at	NM_003981	protein regulator of cytokinesis 1	PRC1
-1.1	3	1.3	211737_x_at	BC005916	pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor 1) /// pleiotrophin (heparin binding growth factor 8, neurite growth-promoting factor)	PTN
-1.2	1.2	1.3	206574_s_at	NM_007079	protein tyrosine phosphatase type IVA, member 3	PTP4A3
0.5	0.5	-0.4	208789_at	BC004295	polymerase I and transcript release factor	PTRF
-1.6	4.2	0.8	206157_at	NM_002852	pentaxin-related gene, rapidly induced by IL-1 beta	PTX3
-0.5	-0.4	-0.7	1555154_a_at	AF142421	quaking homolog, KH domain RNA binding (mouse)	QKI
0.3	0.7	-0.6	203136_at	NM_006423	Rab acceptor 1 (prenylated)	RABAC1
-0.5	-1.3	-0.4	222680_s_at	AK001261	denticleless homolog (Drosophila)	DTL
-0.6	3.5	-1.7	218723_s_at	NM_014059	response gene to complement 32	RGC32
-0.3	2.3	-0.5	217983_s_at	NM_003730	ribonuclease T2	RNASET2
0.3	0.6	0.2	200963_x_at	NM_000993	ribosomal protein L31 (RPL31), transcript variant 1	RPL31
0.2	0.5	0.2	200032_s_at	NM_000661	ribosomal protein L9 /// ribosomal protein L9	RPL9
0.3	0.5	0.2	200834_s_at	NM_001024	ribosomal protein S21	RPS21
0.3	0.6	0.1	201257_x_at	NM_001006	ribosomal protein S3A	RPS3A
0.3	0.5	0.2	200024_at	NM_001009	ribosomal protein S5 (RPS5)	RPS5
-0.2	1.5	-0.6	212647_at	NM_006270	related RAS viral (r-ras) oncogene homolog	RRAS
-0.2	-0.5	0.5	201845_s_at	AB029551	RING1 and YY1 binding protein	RYBP
0.9	-1.2	-1	204268_at	NM_005978	S100 calcium binding protein A2	S100A2
-0.5	1.6	0.6	203186_s_at	NM_002961	S100 calcium binding protein A4 (calcium protein, calvasculin, metastasin, murine placental homolog)	S100A4
-0.5	0.8	0.5	218276_s_at	NM_021818	salvador homolog 1 (Drosophila)	SAV1
-1	0.8	1.9	204035_at	NM_003469	secretogranin II (chromogranin C)	SCG2
-0.6	1.1	0.7	223283_s_at	AF039698	serologically defined colon cancer antigen 33	SDCCAG33
-3.8	4.7	1	205405_at	NM_003966	sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain. (semaphorin) 5A	SEMA5A
0.5	-1.1	0.3	201194_at	NM_003009	selenoprotein W, 1	SEPW1
0.3	-0.3	-0.4	200971_s_at	NM_014445	stress-associated endoplasmic reticulum protein 1	SERP1
2.2	-4	0.7	202628_s_at	NM_000602	serine (or cysteine) proteinase inhibitor, clade E (nexin, plasminogen activator inhibitor type 1), member 1	SERPINE1
-1.1	3.4	0.6	202283_at	NM_002615	serine (or cysteine) proteinase inhibitor, clade F (alpha-2 antiplasmin, pigment epithelium derived factor), member	SERPINF1
0.6	-0.4	-0.4	223394_at	BC002670	SERTA domain containing 1	SERTAD1
-0.5	-0.4	-0.4	1555334_s_at	AF439324	solute carrier family 30 (zinc transporter), member 5	SLC30A5
0.4	-0.6	-0.9	200924_s_at	NM_002394	solute carrier family 3 (activators of dibasic and neutral amino acid transport), member 2	SLC3A2
-0.4	0.8	0.3	201321_s_at	NM_003075	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 2	SMARCC2
-0.3	1	-1.5	202936_s_at	NM_000346	SRY (sex determining region Y)-box 9 (campomelic dysplasia, autosomal sex-reversal)	SOX9
-0.2	1.4	-1	202308_at	NM_004176	sterol regulatory element binding transcription factor 1	SREBF1
0.5	-0.5	-0.2	218140_x_at	NM_021203	signal recognition particle receptor, B subunit	SRPRB

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0.5	0.7	0.6	205499_at	NM_014467	sushi-repeat-containing protein, X-linked 2	SRPX2
0.5	-0.7	-0.5	205743_at	NM_003149	SH3 and cysteine rich domain	STAC
-0.6	1.4	-1	217853_at	NM_022748	tensin-like SH2 domain containing 1	TENS1
0.5	-1.6	-0.5	218368_s_at	NM_016639	tumor necrosis factor receptor superfamily, member 12A	TNFRSF12A
-0.3	1.1	-0.5	207643_s_at	NM_001065	tumor necrosis factor receptor superfamily, member 1A	TNFRSF1A
-0.2	1.4	0.9	203786_s_at	NM_003287	tumor protein D52-like 1	TPD52L1
-0.3	1.8	1	210372_s_at	AF208012	tumor protein D52-like 1	TPD52L1
-0.2	1.6	-0.7	206117_at	NM_000366	tropomyosin 1 (alpha)	TPM1
0.4	0.9	-0.5	204083_s_at	NM_003289	tropomyosin 2 (beta)	TPM2
-0.2	0.4	-1.1	218145_at	NM_021158	tribbles homolog 3 (Drosophila)	TRIB3
-0.4	1.6	-0.5	202342_s_at	NM_015271	tripartite motif-containing 2	TRIM2
0.7	0.8	1	201644_at	NM_003313	tissue specific transplantation antigen P35B	TSTA3
0.4	-0.5	0.3	203008_x_at	NM_005783	thioredoxin domain containing 9	TXNDC9
-0.9	-0.3	-0.5	204881_s_at	NM_003358	UDP-glucose ceramide glucosyltransferase	UGCG
0.4	-0.7	-0.5	203234_at	NM_003364	uridine phosphorylase 1	UPP1
-0.5	1.3	0.8	226029_at	AB033041	vang-like 2 (van gogh, Drosophila)	VANGL2
1.9	-0.8	0.6	205990_s_at	NM_003392	wingless-type MMTV integration site family, member 5A	WNT5A
0.4	-0.5	-0.6	217785_s_at	NM_006555	SNARE protein Ykt6	YKT6
-0.3	0.4	0.5	202979_s_at	NM_021212	HCF-binding transcription factor Zhangfei	ZF
-0.3	0.9	0.2	218645_at	NM_021994	zinc finger protein (C2H2 type) 277	ZNF277
-0.4	0.7	0.5	231864_at	D31763	zinc finger protein 33a (KOX 31)	ZNF33A

**Supplementary Table S3.** The 23 genes upregulated commonly by Nurr1 in 3 hNSC lines

Probe I	Gene name	Fold change		
		F5	A4	F3
204359_at	Fibronectin leucine rich transmembrane protein 2	1.9	0.3	3.5
<b>206023_at</b>	<b>Neuromedin U</b>	<b>1.2</b>	<b>1.5</b>	<b>1.6</b>
<b>203951_at</b>	<b>Calponin 1, basic, smooth muscle</b>	<b>0.6</b>	<b>2.4</b>	<b>1.6</b>
<b>204480_s_at</b>	<b>Chromosome 9 open reading frame 16</b>	<b>0.5</b>	<b>2.3</b>	<b>1.6</b>
218309_at	Calcium/calmodulin-dependent protein kinase II	1.0	0.9	1.2
218899_s_at	Brain and acute leukemia, cytoplasmic	1.3	1.0	1.1
201644_at	Tissue specific transplantation antigen P35B	0.7	0.8	1.0
219922_s_at	Latent transforming growth factor beta binding protein3	0.6	2.2	1.0
201431_s_at	Dihydropyrimidinase-like 3	0.5	1.0	0.9
202555_s_at	Myosin, light polypeptide kinase	1.2	0.7	0.8
212805_at	BMCC1	0.8	3.2	0.8
205381_at	Leucine rich repeat containing 17	0.8	1.6	0.8
221582_at	Histone 3, H2a	0.5	1.4	0.8
215785_s_at	Cytoplasmic FMR1 interacting protein 2	0.5	1.6	0.6
205499_at	Sushi-repeat-containing protein, X-linked 2	0.5	0.7	0.6
200974_at	Actin, alpha 2, smooth muscle, aorta	0.5	3.2	0.4
1553588_at	NADH dehydrogenase 3	0.3	0.9	0.4
207132_x_at	Prefoldin 5	0.4	0.6	0.3
210908_s_at	Prefoldin 5	0.4	0.5	0.3
200963_x_at	Ribosomal protein L31	0.3	0.6	0.2
200024_at	Ribosomal protein S5	0.3	0.5	0.2
200834_s_at	Ribosomal protein S21	0.3	0.5	0.2
200032_s_at	Ribosomal protein L9	0.2	0.5	0.2
201257_x_at	Ribosomal protein S3A	0.3	0.6	0.1

**Supplementary Table S4.** The 15 genes downregulated commonly by Nurr1 in 3 hNSC lines

Probe I	Gene name	Fold change		
		F5	A4	F3
202107_s_at	MCM2 minichromosome maintenance deficient 2, mitotin ( <i>S. cerevisiae</i> )	-0.4	-0.3	-0.2
210983_s_at	MCM7 minichromosome maintenance deficient 7 ( <i>S. cerevisiae</i> )	-0.3	-0.5	-0.3
202290_at	PDGFA associated protein 1	-0.9	-0.3	-0.3
222962_s_at	MCM10 minichromosome maintenance deficient 10	-0.1	-1.0	-0.4
202444_s_at	Endoplasmic reticulum lipid raft-associated protein 1	-0.3	-0.4	-0.4
218115_at	ASF1 anti-silencing function 1 homolog B	-0.3	-0.9	-0.4
218009_s_at	Protein regulator of cytokinesis 1	-0.4	-0.6	-0.4
1555334_s_at	Solute carrier family 30 (zinc transporter), member 5	-0.5	-0.4	-0.4
222680_s_at	RA-regulated nuclear matrix-associated protein	-0.5	-1.3	-0.4
206245_s_at	Influenza virus NS1A binding protein	-0.3	-0.7	-0.5
1563111_a_at	FLJ20522	-0.4	-0.5	-0.5
204881_s_at	UDP-glucose ceramide glucosyltransferase	-0.9	-0.3	-0.5
200606_at	Desmoplakin	-1.4	-1.1	-0.6
1555154_a_at	Quaking homolog, KH domain RNA binding	-0.5	-0.4	-0.7
<b>213524_s_at</b>	<b>Putative lymphocyte G0/G1 switch gene</b>	<b>-1.1</b>	<b>-0.9</b>	<b>-1.2</b>



Supplementary Table S5. A) Relative gene expression profiles from human CNS tissues

Samples	BAALC	CAMK2N1	FLRT2	CYFIP2	DPYSL3	C9orf16	LTPB3	PFDN5	HIST3H2A	PRUNE2(BMCC1)	QKI	IVNSIABP
Probe ID	218899 s at	218309 at	204359 at	220999 s at	201431 s at	204480 s at	219922 s at	210908 s at	221582 at	212805 at	212636 at	201362 at
Amygdala.1	256.40	1333.10	56.60	462.30	51.40	817.00	93.20	462.00	22.10	157.30	1109.60	14.80
Amygdala.2	724.00	3878.80	163.20	1014.00	76.10	745.10	235.10	565.20	41.40	502.20	2795.20	44.90
Caudatenucleus.1	159.70	854.30	45.30	138.60	91.00	211.80	31.00	532.50	24.60	154.30	1508.70	37.00
Caudatenucleus.2	553.40	981.90	43.60	152.20	111.50	418.60	93.30	537.70	33.80	389.10	1422.30	109.60
Cerebellum.1	226.30	164.50	6.10	238.70	14.90	251.20	32.40	485.40	95.10	176.80	268.20	8.30
Cerebellum.2	175.30	171.20	5.40	243.60	12.30	104.40	20.20	375.50	56.20	188.00	204.00	8.60
CerebellumPeduncles.1	84.40	438.90	7.10	180.80	14.50	385.90	32.60	558.00	87.50	345.90	478.30	11.50
CerebellumPeduncles.2	16.90	511.80	9.50	144.30	20.90	479.10	42.40	714.00	122.90	280.70	299.80	15.20
CingulateCortex.1	371.00	1553.80	131.90	178.90	19.20	327.30	21.10	451.80	34.30	260.80	889.20	15.30
CingulateCortex.2	175.70	2000.80	108.40	277.70	22.50	502.30	28.80	467.00	30.60	230.70	1186.00	10.70
Fetalbrain.1	277.30	804.00	252.30	80.10	2515.70	465.40	32.00	1237.60	49.60	31.80	467.80	132.00
Fetalbrain.2	116.30	949.10	318.80	195.40	3759.50	684.60	40.70	1155.90	75.90	34.90	533.50	157.90
GlobusPallidus.1	233.20	888.90	29.40	78.20	12.10	212.40	25.70	264.20	23.10	118.00	349.00	9.20
GlobusPallidus.2	201.50	972.80	75.00	128.20	26.60	121.10	20.20	221.20	26.20	81.20	304.30	8.30
Hypothalamus.1	652.60	1487.50	57.90	198.40	315.40	193.20	65.60	1318.80	27.70	456.50	4547.60	63.60
Hypothalamus.2	359.10	1474.10	33.30	168.20	245.50	286.30	85.20	940.80	38.30	569.90	2246.30	48.80
MedullaOblongata.1	222.60	1203.40	84.40	88.60	17.30	412.00	28.30	444.90	24.20	266.50	1140.50	18.10
MedullaOblongata.2	209.00	2020.80	38.10	149.70	31.30	529.80	26.80	490.20	28.10	320.40	1471.00	20.80
OccipitalLobe.1	361.60	2506.90	140.20	130.60	71.80	500.80	33.70	494.40	29.30	310.70	2261.30	12.30
OccipitalLobe.2	262.10	1924.30	113.50	104.20	40.40	336.80	29.20	389.30	23.30	222.80	2127.60	11.30
ParietalLobe.1	157.00	2325.70	72.10	166.70	36.90	388.30	29.30	290.30	49.80	280.90	2079.60	12.70
ParietalLobe.2	223.40	2058.30	94.60	109.80	26.70	468.30	35.70	344.80	42.40	240.80	1908.90	12.30
Pons.1	123.10	1138.40	68.60	133.20	42.10	254.60	34.20	344.40	34.20	141.20	478.10	11.10
Pons.2	130.20	992.80	20.30	119.30	47.40	244.50	25.00	244.10	28.60	121.70	433.60	10.40
PrefrontalCortex.1	264.20	2254.00	188.20	469.10	139.10	579.50	129.70	1003.40	29.30	660.40	2086.10	17.60
PrefrontalCortex.2	502.70	3907.10	305.10	517.40	212.20	913.10	228.00	900.90	41.30	559.00	3950.90	65.30
Spinalcord.1	730.00	572.10	26.30	75.80	885.80	200.60	248.00	799.20	36.80	277.60	5685.90	72.10
Spinalcord.2	642.90	392.10	19.40	45.10	555.10	159.90	205.50	840.40	24.50	264.20	3853.00	42.10
SubthalamicNucleus.1	213.30	893.60	62.20	104.60	12.50	455.90	26.10	239.30	34.50	175.90	296.80	11.10
SubthalamicNucleus.2	348.00	1410.40	49.30	128.20	29.20	283.40	34.40	321.80	30.90	196.10	710.80	12.50
TemporalLobe.1	202.10	1842.50	52.20	114.00	35.60	1017.50	22.90	448.00	41.30	91.90	162.60	8.50
TemporalLobe.2	198.20	1710.90	35.30	67.90	44.20	967.10	10.00	661.60	28.20	120.70	345.80	9.30
Thalamus.1	254.50	960.90	23.80	233.00	68.50	153.70	30.70	679.50	40.70	274.80	1433.40	14.60
Thalamus.2	266.60	1144.00	10.40	270.60	57.20	183.10	13.70	980.70	38.10	418.10	1261.70	28.40
Wholebrain.1	427.70	2334.50	99.00	250.70	30.00	1538.50	87.60	412.90	25.80	89.30	1071.00	10.70
Wholebrain.2	273.30	2490.40	130.00	145.40	111.20	1156.20	30.20	1626.10	31.30	164.50	1471.00	13.30
Pineal_day.1	47.40	11.70	14.40	1182.80	728.40	398.00	180.00	2285.60	29.80	85.30	338.60	49.90
Pineal_day.2	261.70	33.30	13.30	1085.20	570.70	477.20	934.20	2341.90	22.90	561.80	689.80	84.30
Pineal_day.3	13.40	23.10	9.40	468.60	594.70	221.70	205.60	1777.50	36.70	131.00	376.20	16.00
Pineal_day.4	10.70	22.10	11.80	292.60	316.20	36.00	29.00	997.10	30.80	19.80	91.90	12.30
Pineal_day.5	11.90	61.50	13.20	253.00	444.10	30.00	12.40	1379.40	34.50	161.30	76.00	13.90
Pineal_night.1	62.80	41.30	14.40	599.40	1222.60	444.80	361.80	2545.30	12.10	274.00	528.60	105.60
Pineal_night.2	31.40	14.40	43.70	1255.70	1028.60	391.30	532.10	2351.20	25.50	290.30	223.10	39.90
Pineal_night.3	12.30	18.00	10.80	314.00	737.70	218.30	253.00	1447.40	35.10	161.30	74.90	14.60
Pineal_night.4	12.80	52.10	11.80	178.30	447.30	16.40	35.40	912.50	31.20	252.90	107.60	17.90
Pineal_night.5	6.90	49.10	11.50	236.20	499.50	64.30	34.30	1184.90	29.80	167.90	123.50	11.80
Retina.1	411.50	230.90	19.50	23.90	369.40	69.40	120.60	609.00	26.70	282.10	2700.80	32.10
Retina.2	329.70	93.80	22.10	14.70	300.30	109.80	74.80	575.30	42.30	247.30	2844.30	28.00
Retina.3	6.30	206.10	437.30	39.00	896.00	356.30	1009.40	1770.60	42.90	125.50	224.30	27.80
Retina.4	6.00	211.70	526.60	27.10	786.20	286.30	741.00	1823.30	53.20	172.70	215.80	22.90
Average expression of CNS tissues	236.41	1072.35	82.73	265.48	374.91	401.38	134.64	884.90	38.22	242.18	1231.10	31.74
Median expression of all tissues	4.90	15.40	11.30	26.50	20.10	197.40	36.70	734.70	30.60	11.00	31.60	15.90
Average(CNS)/Median	48.25	69.63	7.32	10.02	18.65	2.03	3.67	1.20	1.25	22.02	38.96	2.00
Fetal brain expression/Median	40.16	56.92	25.27	5.20	156.10	2.91	0.99	1.63	2.05	3.03	15.84	9.12
The highest expression of CNS	Spinal cord	Prefrontal cortex	Fetal brain	Amygdala	Fetal brain	Whole brain	Retina	Pineal	CerebellumPeduncles	Prefrontal Cortex	Spinal cord	Fetal brain
The highest expression of all tissues	Spinal cord	Prefrontal cortex	Fetal brain	Amygdala	Fetal brain	Whole brain	Thyroid	CD19+ Bcells(neg-scl)	Leukemia, chronic Myelogenous K-562	Prefrontal Cortex	Spinal cord	CD33+ Myeloid

Supplementary Table S5. B) Gene expression profiles from human tissues and cells

Samples	BAALC (218899_s_at)	CAMK2N1 (218309_at)	FLT2 (204359_at)	CYFIP2 (220999_s_at)	DPYSL3 (201431_s_at)	C9orf16 (204480_s_at)	LTBP3 (219922_s_at)	PFDN5 (210908_s_at)	PFDN5 20'	HIST3H2A (221522_at)	PRUNE2(BMCC1) (212805_at)	QKI (212636_at)	IVNS1ABP (201362_at)	PFDN5 (207132_x_at)
721_B_lymphoblasts.1	5.4	7.8	8.5	222.7	3.8	197.5	12.9	1121.7	1158.7	33.9	7.4	10.1	78.1	1158.7
721_B_lymphoblasts.2	5.4	7.9	7.9	189.8	3.8	188.1	12.9	944.3	1101.3	34.6	7.5	16.9	56.2	1101.3
Adipocyte.1	4.6	7.7	7.4	11.6	16.2	405.7	60.5	705.1	966	34.5	25.21	55.3	10.1	966
Adipocyte.2	4.1	12.9	105.2	10.9	12.9	554.9	35.1	842.5	1052.4	31.1	27.69	57.1	7.9	1052.4
AdrenalCortex.1	6.2	96.8	13.9	16.3	17.2	1045.4	76.5	588.2	850.1	77.2	10.5	30.4	13.6	850.1
AdrenalCortex.2	4.3	40.4	7.7	14.2	13.6	312.2	24	461.6	979.6	31.2	9.3	27.4	10.7	979.6
Adrenalgland.1	4.9	71.2	8.2	22	13.3	864.2	29	480.5	833.7	42	7.5	14.1	8.6	833.7
Adrenalgland.2	4.9	94.9	10.2	37.1	14.5	963.6	47.3	638.1	823.7	95.9	8	17.2	9.9	823.7
Amygdala.1	256.4	1331.1	56.6	462.3	51.4	917	93.2	462	438.7	22.1	157.3	1109.6	14.8	438.7
Amygdala.2	724	3878.8	163.2	1014	76.1	745.1	235.1	565.2	645.8	41.4	502.2	2795.2	44.9	645.8
Appendix.1	6.2	15.2	15.3	45.2	76.9	19.2	32.9	667.4	1455.4	28.6	50.4	76.8	10.3	1455.4
Appendix.2	5.1	15.2	21	21.8	63	32.8	29.6	790.8	1559.1	37.7	93.8	57.5	10.6	1559.1
AtrioventricularNode.1	3.3	4.9	9.4	16.8	11.7	15.2	23.6	126.2	136.7	28.4	6.8	21.94	8.2	136.7
AtrioventricularNode.2	4.3	5.5	12.8	14	12.4	17.3	26.4	151.7	302.7	28.8	7.9	195.7	14.6	302.7
BDC4+ DendriticCells.1	4.8	6.7	6.5	65.5	7	301.6	47.4	2025.6	2495.7	23.2	6.9	190.3	77.9	2495.7
BDC4+ DendriticCells.2	5	7.3	7.8	120	39	219.5	79.2	2388.5	1564	30.8	9.5	269.9	41.2	1564
Bonemarrow.1	3.6	5.7	6	22	12	164.1	10.9	439.3	562.4	26.2	7.4	15.2	10.2	562.4
Bonemarrow.2	5.4	7.8	8.8	34	14.1	290.7	31	808.7	984	46.3	10.5	21.6	16	984
BronchialEpithelialCells.1	4.2	21	77.1	9.5	9.5	258.9	10.3	1250	1446.9	28.4	6.4	13.6	33.9	1446.9
BronchialEpithelialCells.2	4.5	76.2	47.6	10.8	11.2	271.9	25	906.3	1192.4	30.2	6.9	17.1	16.2	1192.4
CD105+ Endothelial.1	4.9	7.5	7.9	14.5	3.4	165.1	92.3	1793.9	1752.4	32.1	7.5	27.6	77.6	1752.4
CD105+ Endothelial.2	4	6	7.2	9.4	7	26.6	24.4	923.4	1242.2	25.3	6.2	22.6	33.5	1242.2
CD14+ Monocytes.1	4.7	7.3	6.3	17.2	3.2	109.4	21.8	3683.9	2668.3	32.3	7.2	417.5	39.9	2668.3
CD14+ Monocytes.2	4.7	7.1	7.1	28.8	11.4	183.1	11	3043.5	4019.8	25	7.1	582.5	73.3	4019.8
CD19+ BCells(neg_sel).1	4.4	6.9	5.2	205.4	10.2	644.5	45.1	3244.9	4029.2	27.8	6.4	13.5	19.3	4029.2
CD19+ BCells(neg_sel).2	4.9	7.5	7.6	349.1	41	255.4	37.6	4209.5	3623.5	31.8	7.6	19.8	53.4	3623.5
CD33+ Myeloid.1	5.6	8.7	9	15.1	5.4	50.8	15	288.2	2284.6	21.9	12.1	358.9	334	2284.6
CD33+ Myeloid.2	5.6	8.8	8.8	22	6.4	99.2	28.6	2947.6	2825.6	29	11.3	334.8	326.1	2825.6
CD34+ 1	2.2	7.7	7.5	111.1	3.7	144.7	116.3	1849.1	1665.6	41.7	7.4	29.6	17.9	1665.6
CD34+ 2	10.2	8.8	8.8	25.4	11.7	218.8	89	2033.4	1570.6	96.9	8.8	22.4	32.5	1570.6
CD4+ Tcells.1	4.4	6.7	6.4	407.6	5.7	235	707	2558.4	3361.8	28.4	6.4	11.7	206.3	3361.8
CD4+ Tcells.2	5.1	8.8	8.1	439	41	303.1	531.3	3024.4	3709	33.3	7.5	13.7	154.7	3709
CD56+ NKCells.1	5.5	8	8.2	336.6	7.6	377.5	169.7	2672	2198.3	35.6	7.9	34.6	282.5	2198.3
CD56+ NKCells.2	5.4	7.4	7.4	432.7	35	345.3	110.2	2772.7	2117.2	39.8	7.3	23	190.3	2117.2
CD71+ EarlyErythroid.1	4.5	6.8	6.7	11.8	3	124.7	27.2	1225.1	1445.6	52.1	7.3	12.1	55.9	1445.6
CD71+ EarlyErythroid.2	3.9	5.9	6	9.8	2.8	94.7	23.5	1186.5	1484.3	47.6	6.1	23.5	82.1	1484.3
CD8+ Tcells.1	4.2	7.8	6.6	311.7	3	228.8	752.7	2544.7	3013.3	27.2	6	11	127.7	3013.3
CD8+ Tcells.2	4.2	8	6.6	342.9	8.5	178.1	535.7	2674.4	3139.2	27.5	6.1	11.3	164	3139.2
CardiacMyocytes.1	4.7	9.6	315.2	12.9	841.7	201.7	126.2	896.3	1220.1	40.1	7.4	29.4	12.7	1220.1
CardiacMyocytes.2	7.6	10.2	15.9	19.6	518.2	34.5	45.2	232.3	264.5	49.5	11.8	38.9	19.6	264.5
CaudateNucleus.1	159.7	854.3	45.3	138.6	91	211.8	31	532.5	730.1	24.6	154.3	1508.7	37	730.1
CaudateNucleus.2	553.4	981.9	43.6	152.2	111.5	418.6	93.3	537.7	883.6	33.8	389.1	1422.3	109.6	883.6
Cerebellum.1	226.3	164.5	6.1	238.7	14.9	251.2	32.4	485.4	714.4	95.1	176.8	268.2	8.3	714.4
Cerebellum.2	175.3	171.2	5.4	243.6	12.3	104.4	20.2	375.5	559	56.2	188	204	8.6	559
CerebellumPeduncles.1	84.4	438.9	7.1	180.8	14.5	385.9	32.6	558	1003.3	87.5	945.9	478.3	11.5	1003.3
CerebellumPeduncles.2	16.9	511.8	9.5	144.3	20.9	479.1	42.4	734	122.9	288.7	299.8	15.2	1334.5	299.8
CiliaryGanglion.1	3	4.6	9.2	161.9	58.2	14.3	24.8	116.7	284.6	21.9	289.2	105	7.6	284.6
CiliaryGanglion.2	3.5	5.1	9.7	19.6	51.4	16.4	20	134	227.6	11.8	108.9	56.3	19.9	227.6
CingulateCortex.1	371	1553.8	131.9	178.9	19.2	327.3	21.1	451.8	844.5	34.3	260.8	899.2	15.3	844.5
CingulateCortex.2	175.7	2000.8	108.4	277.7	22.5	502.3	28.8	467	593.8	30.6	230.7	2106	10.7	593.8
ColorectalAdenocarcinoma.1	5.3	89.6	8.5	13.4	13.7	533.3	1048.9	212.1	196.9	51.3	8.4	18.9	16.5	196.9
ColorectalAdenocarcinoma.2	5.5	34.8	5.4	8.2	9.1	1081.7	1043.6	307.6	234.1	50.9	5.3	11.2	7.8	234.1
DorsalRootGanglion.1	3.2	4.3	10.4	12.2	34.2	32.9	24	157	176.2	17.5	427.4	288.2	7.8	176.2
DorsalRootGanglion.2	4.2	6.5	16	46.9	54.5	61.4	29.6	163.3	294.4	26.6	528.7	343.6	10.9	294.4
FetalThyroid.1	4.4	9.6	62.6	11.6	15.9	217.9	156.3	1050.8	1603.8	27.3	8.9	18.7	14.4	1603.8
FetalThyroid.2	4.2	6.5	129.4	15.7	33.2	186.1	263.5	1074.5	1502.5	27.2	6.5	26.9	29.1	1502.5
FetalBrain.1	277.3	804	252.3	80.1	2515.7	465.4	32	1237.6	1441.6	49.6	31.8	467.8	132	1441.6
FetalBrain.2	116.3	949.1	318.8	195.4	3759.5	684.6	40.7	1155.9	1789.6	75.9	34.9	533.5	157.9	1789.6
FetalLiver.1	4.6	31.1	11.2	15.1	3	21.6	33.3	349.7	333.4	32.4	9.8	21.4	12.8	333.4
FetalLiver.2	3.1	32.3	16.6	19.5	2.3	14.9	11.6	398.2	483.5	27.1	6.5	13.3	18.6	483.5
FetalLung.1	3	82.6	11	8.1	94.6	114.4	189.3	879.3	1079.7	19.6	6.4	110.4	5.5	1079.7
FetalLung.2	4.3	107.7	42.9	11.1	123.7	164.4	196.6	1320.2	1725	26.9	6.4	182.9	85.6	1725
GlobusPallidus.1	233.2	888.9	29.4	78.2	12.1	212.4	25.7	264.2	429.6	23.1	118	349	9.2	429.6
GlobusPallidus.2	201.5	972.8	75	128.2	26.6	121.1	20.2	221.2	376.3	26.2	81.2	304.3	8.3	376.3
Heart.1	6.9	9.8	12.8	17.8	21.2	389.1	89	309.9	474.2	66.6	13.6	29.2	16.5	474.2
Heart.2	5.1	20	9.9	16.6	18.5	915.3	265.3	1170.6	1431.7	78.7	9.1	26.7	12.9	1431.7
Hypothalamus.1	652.5	1487.5	57.9	315.8	183.4	139.2	65.6	1318.8	1546.1	21.9	456.5	4547.6	638	1545.8
Hypothalamus.2	3591.3	1474.1	33.3	168.2	245.5	286.3	85.2	940.8	1686.4	36.3	569.9	2246.3	48.8	1686.4
Kidney.1	4.4	131.5	7.9	186.2	14.8	61.7	34.1	473.5	792.3	21.2	8	18	13.8	792.3
Kidney.2	2.9	132.2	7	221.5	4.5	51.6	22.2	350.1	625.8	19.7	6.2	11.9	17.5	625.8
Leukemia_chronicMyelogenousK-562.1	4	6.3	6.2	10.7	2.8	98.2	23.7	961.6	1155.1	25.2	8.3	19	24.2	1155.1
Leukemia_chronicMyelogenousK-562.2	3.9	7.9	6.1	10.4	3.9	109.2	30.2	1120.9	1329	160.6	7.9	16.8	13.3	1329
Leukemia_promyelocytic-HL-60.1	4	6.3	5.4	19	10	242.6	11	673.3	755.1	48.4	8.4	10	14.3	755.1
Leukemia_promyelocytic-HL-60.2	3.7	5.8	5.7	41.4	8.6	365.7	8.8	721	1010.8	27.5	5.9	12.4	10	1010.8
Leukemialymphoblastic(MOLT-4)-1	3.2	5.2	4.9	118.1	11.5	408.2	19.6	601.7	748.6	23.4	7.7	6.7	23.7	748.6
Leukemialymphoblastic(MOLT-4)-2	3.9	6.1	6	118.1	7.1	546.3	11.5	736.9	901	32	8.4	14.4	22.4	901
Liver.1	6.1	31.8	10.1	35.1	16.4	122.8	63.9	496.4	421.6	38.6	10.9	20.9	15.9	421.6
Liver.2	5.8	18.6	14.2	22	18	321.4	84.9	649.9	560.4	37.2	10.4	20.7	15.1	560.4
Lung.1	4.8	219	6.5	17.4	32.2	700.5	334.1	1258.2	1254.4	26.4	7.4	20.4	10	1254.4
Lung.2	5.2	385	7.7	13.4	69.8	1052.4	785.7	938.5	1184.2	26.5	7.6	21.5	10.2	1184.2
Lymphnode.1	3.3	6.6	39.9	38	25.5	179.8	87	1345.9	1495.8	21.6	8.6	42.7	56.7	1495.8
Lymphnode.2	4.2	7.1	58.5	53.1	15.8	168.8	112.9	1527.1	1599.7	27.9	8.9	50	29.3	1599.7
Lymphoma_burkitts(Daudi).1	5.3	8.8	8.4	137.1	13.2									

Prostate.1	5.3	98.4	22.3	23.3	252.7	702.3	515.6	607.5	744	51.3	78.5	22	15.4	744
Prostate.2	5	85.8	11.9	13.5	169.1	555.3	465.3	710.2	917.1	55.3	50.7	17	16	917.1
SalivaryGland.1	3.6	9.4	5.9	14.2	12.3	46	21.4	661.2	1046.5	34.6	21	14.6	43.9	1046.5
SalivaryGland.2	3.5	4.2	8.7	12.4	12.9	9.2	19.1	636.9	965.9	26.6	46.7	13.2	118.1	965.9
SkeletalMuscle.1	5.3	8.6	9.8	27.6	16.6	24.6	29.2	135.6	244.8	63.4	10.5	80.1	14.1	244.8
SkeletalMuscle.2	5.5	8.9	12.7	24.6	15	25.1	31.2	312.4	333.7	44.4	10.4	41.8	13.8	333.7
Skin.1	4.3	11.9	9.8	20.9	13.4	17.7	21.7	407.3	566.8	23.6	7.8	22.7	9.7	566.8
Skin.2	3.3	7.5	7.8	10.6	11.8	21.3	19.1	128.3	171.7	23.8	6	21.5	10.6	171.7
SmoothMuscle.1	4.6	8	12	11.4	460.9	138.6	105.8	1211.3	1565.7	29.4	7.2	17.4	10.4	1565.7
SmoothMuscle.2	5.4	11.4	9.5	13.1	501.2	184	100	1423.5	1770.7	31.1	8.7	21.9	11.3	1770.7
Spinalcord.1	730	572.1	26.3	75.8	885.8	200.6	248	799.2	1347.6	36.8	277.6	5685.9	72.1	1347.6
Spinalcord.2	642.9	392.1	19.4	45.1	555.1	159.9	205.5	840.4	1128.2	24.5	264.2	3853	42.1	1128.2
SubthalamicNucleus.1	213.3	893.6	62.2	104.6	12.5	455.9	26.1	239.3	513.5	34.5	175.9	296.8	11.1	513.5
SubthalamicNucleus.2	348	1410.4	49.3	128.2	29.2	283.4	34.4	321.8	654	30.9	196.1	710.8	12.5	654
SuperiorCervicalGanglion.1	6.4	69.6	13.5	32.3	67.3	30.6	33.2	67.6	336.5	36.7	16.2	74.6	16.1	336.5
SuperiorCervicalGanglion.2	4.9	15.9	26.7	21.2	38.8	41.8	26.1	123.4	340.2	29.9	12.4	61.5	9.6	340.2
TemporalLobe.1	202.1	1842.5	52.2	114	35.6	1017.5	22.9	448	978	41.3	91.9	162.6	8.5	978
TemporalLobe.2	198.2	1710.9	35.3	67.9	44.2	967.1	10	661.6	1200.1	28.2	120.7	345.8	9.3	1200.1
Testis.1	3.8	7.7	6.1	10	14.6	116.2	29.5	1023.2	1157.8	27.7	7.1	20.8	9.9	1157.8
Testis.2	3.8	5.9	7	9.2	14.2	109.7	28.7	998.9	1214.5	24.6	5.9	16.3	8.3	1214.5
TestisGermCell.1	4.1	6.9	27.3	11	20.9	232.7	25.5	1309.5	1602.7	26.4	6.1	71.4	11.1	1602.7
TestisGermCell.2	3.2	22.3	62.3	7.5	170	104.6	27.7	703.4	1095	21.4	70.3	123.6	22.7	1095
TestisInterstitial.1	2.4	4.6	9.8	6.3	19.9	70	14.7	659.4	769.3	15.7	5	15.1	7.9	769.3
TestisInterstitial.2	5	8.3	12.4	13.5	18.5	94.3	30.2	841.6	1679.4	32.3	10.4	23.7	13	1679.4
TestisLeydigCell.1	4.1	8.8	10.4	11.5	25.9	78.8	35.4	604.6	875.7	29	19.5	17.8	9.6	875.7
TestisLeydigCell.2	4.6	7.3	11.2	12.7	16.8	80.9	27.4	592.9	1097.9	34.5	9.4	40.3	11.8	1097.9
TestisSeminiferousTubule.1	5.2	8.1	15.2	13.3	25.4	111.1	32.3	699	1196.1	34	11.1	50.6	13.7	1196.1
TestisSeminiferousTubule.2	2.3	3.9	7.8	5.9	9.1	87.7	5.4	565	1062.5	15.1	3.7	68.9	5.2	1062.5
Thalamus.1	254.5	960.9	23.8	233	68.5	153.7	30.7	679.5	986.3	40.7	274.8	1433.4	14.6	986.3
Thalamus.2	266.6	1144	10.4	270.6	57.2	183.1	13.7	980.7	1115.8	38.1	418.1	1261.7	28.4	1115.8
Thymus.1	3.8	6	6.3	122.1	14.5	486.3	76.5	1419.4	1416	28.5	5.8	14.7	10.4	1416
Thymus.2	3.1	4.8	4.8	38.1	11.1	450.2	53.1	1049.9	1351.2	22.1	5.1	10.2	8.9	1351.2
Thyroid.1	5	14.6	22.4	17.9	36.2	233.5	1693.9	1629.7	1406.6	22.9	7.1	48.9	27.9	1406.6
Thyroid.2	6	16.7	41.1	16	22.5	203.5	2587.4	981	1076.6	32.9	9.3	58	33.1	1076.6
Tongue.1	4.5	13.5	7.7	17.4	16.7	112.5	38.1	411.7	593.4	34.3	9	29.1	11.7	593.4
Tongue.2	4.3	13.9	10.4	13	33.1	23.7	36	340.7	465.3	28.9	17.9	26.7	12.5	465.3
Tonsil.1	3.9	6.5	6.5	71.5	15.6	226.9	30.9	761.3	1064.5	35.4	8.2	16.5	12.9	1064.5
Tonsil.2	4.7	7.7	7.4	42	17.5	278.5	34.7	851.8	1475.2	30	10.5	17.4	26	1475.2
Trachea.1	3.8	5.9	19.4	20	91.4	193.3	46.4	539	605.6	24.6	11.8	14.3	58.4	605.6
Trachea.2	3.5	6	8.9	9.4	75.3	129.1	30.4	517.5	669.7	23.3	17.9	17.5	33.4	669.7
TrigeminalGanglion.1	5.2	19.8	100.4	24.5	29	23.6	42.5	125.6	346.7	31.5	83.1	118.3	17.5	346.7
TrigeminalGanglion.2	4	14.1	37.1	17.4	31.6	10	28.1	90.7	140.4	26.3	58.1	157.2	10.6	140.4
Uterus.1	2.7	66.3	43.5	5.8	220.3	25.8	107.2	1056.3	957	16.5	287.1	78.6	39.7	957
Uterus.2	4.5	109	41.3	10.6	199	163.4	636.3	540.9	848.9	30.3	215	24.6	11.6	848.9
UterusCorpus.1	4.3	14.7	9.1	13.5	52.7	33.7	70.1	717.1	1382.7	26.8	61.4	21.4	11.2	1382.7
UterusCorpus.2	3.8	39	10.7	15.9	40.2	18.6	41.4	812.1	1450.5	38.2	7.5	14.9	9.8	1450.5
WholeBlood.1	4.3	6.8	6.8	41.3	15.7	763.7	19.4	1957.7	2431.6	23.5	6.6	363.6	187.6	2431.6
WholeBlood.2	5.3	8.2	8.3	61.3	7.8	358.1	19.3	1752.3	2089.1	28.7	8.3	255.5	153.5	2089.1
Wholebrain.1	427.7	2334.5	99	250.7	30	1538.5	87.6	412.9	429.4	25.8	89.3	1071	10.7	429.4
Wholebrain.2	273.3	2490.4	130	145.4	111.2	1156.2	30.2	1626.1	1466	31.3	164.5	1471	13.3	1466
Colon.1	4.9	399.6	10.2	12	74.2	91.6	48.2	473.4	431.4	31.3	47.6	21.2	111.2	431.4
Colon.2	3.9	270.5	8.8	9.8	23.9	50.5	26.8	723	838.9	25.2	73.3	17.4	88.5	838.9
Pineal_day.1	47.4	11.7	14.4	1182.8	728.4	398	180	2285.6	2143	29.8	85.3	338.6	49.9	2143
Pineal_day.2	261.7	33.3	13.3	1085.2	570.7	477.2	934.2	2341.9	2338.4	22.9	561.8	689.8	84.3	2338.4
Pineal_day.3	13.4	23.1	9.4	468.6	594.7	221.7	205.6	1777.5	2308.1	36.7	131	376.2	16	2308.1
Pineal_day.4	10.7	22.1	11.8	292.6	316.2	36	29	997.1	1684.7	30.8	19.8	91.9	12.3	1684.7
Pineal_day.5	11.9	61.5	13.2	253	444.1	30	12.4	1379.4	2168.8	34.5	161.3	76	13.9	2168.8
Pineal_night.1	62.8	41.3	14.4	599.4	1222.6	444.8	361.8	2545.3	2544.3	12.1	274	528.6	105.6	2544.3
Pineal_night.2	31.4	14.4	43.7	1255.7	1028.6	391.3	532.1	2351.2	2238	25.5	290.3	223.1	39.9	2238
Pineal_night.3	12.3	18	10.8	314	737.7	218.3	253	1447.4	1729.8	35.1	161.3	74.9	14.6	1729.8
Pineal_night.4	12.8	52.1	11.8	178.3	447.3	16.4	35.4	912.5	1537.2	31.2	252.9	107.6	17.9	1537.2
Pineal_night.5	6.9	49.1	11.5	236.2	495.5	64.3	34.3	1184.9	1462	29.8	157.9	123.5	13.8	1462
Retina.1	411.5	230.9	19.5	23.9	369.4	69.4	120.6	699	1097.2	26.7	282.1	2700.8	32.1	1097.2
Retina.2	329.7	93.8	22.1	14.7	300.3	109.8	74.8	575.3	1061.2	42.3	247.3	2844.3	38	1061.2
Retina.3	6.3	206.1	437.3	39	896	356.3	1009.4	1770.6	1881.9	42.9	125.5	224.3	27.8	1881.9
Retina.4	6	211.7	526.6	27.1	786.2	286.3	741	1823.3	1562	53.2	172.7	215.8	22.9	1562
Small_intestine.1	3.6	96.9	7.7	8.7	55.7	16.9	27.4	616.4	671.8	22.5	28.4	18.1	9.5	671.8
Small_intestine.2	5	162.5	8.7	12.2	116.5	24	38.3	827.2	823.4	31.6	20.4	39.3	21.3	823.4

Supplementary Table S6. GWAS analysis of Nurr1 direct targets

	Chromosome	Position	SNP ID	Pubmed ID	P-val	orbeta	super_pop	trait	hpoid	doid	Gene symbol	
CYFIP2	5	156811443	rs10063413	20889312	0.0000126	NA	EUR(4234) ALL(4234)	Bipolar disorder and schizophrenia	HPOID:0007302	DOID:3312	CYFIP2	
	5	156915133	rs11466805	21423239	0.00018	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	ADAM19	
C9orf16	9	130981064	rs3003602	19772629	0.00001	NA	NOPOP(1297) ALL(1297)	Parkinson's disease (age of onset)	HPOID:0001300	DOID:14330	DNM1	
	9	130976557	rs2502731	19772629	0.000075	NA	NOPOP(1297) ALL(1297)	Parkinson's disease (age of onset)	HPOID:0001300	DOID:14330	DNM1	
	9	130998850	rs9644916	21423239	0.000192	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	DNM1	
	9	130999472	rs7022174	21423239	0.000266	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	DNM1	
	9	131000860	rs7854612	21423239	0.00028	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	DNM1	
	9	131001692	rs10987942	21423239	0.000342	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	DNM1	
	9	130999152	rs9644952	21423239	0.00051	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	DNM1	
	9	130932993	rs2417115	21423239	0.00089	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	CIZ1	
PFDN5	12	53731891	rs10876432	19197363	0.000542	NA	EUR(1734) ALL(1734)	Schizophrenia	HPOID:0100753	DOID:5419	SP7	
	12	53734506	rs4759082	19197363	0.000727	NA	EUR(1734) ALL(1734)	Schizophrenia	HPOID:0100753	DOID:5419	NA	
	12	53727955	rs2016266	19197363	0.00091	NA	EUR(1734) ALL(1734)	Schizophrenia	HPOID:0100753	DOID:5419	SP7	
RPS21	20	61047465	rs11204426	22472876	0.000925	NA	EUR(18759) ALL(18759)	Major depressive disorder	HPOID:0000716	DOID:1470	GATA5	
BMCC1 (PRUNE2)	9	79205349	rs7029703	17486107	0.00000223	NA	NOPOP(1024) ALL(1024)	Bipolar disorder	HPOID:0007302	DOID:3312	NA	
	9	79264147	rs526347	20832056	0.000333	NA	ASN(1108) ALL(1108)	Schizophrenia	HPOID:0100753	DOID:5419	PRUNE2	
	9	79550279	rs10111711	16252231	0.000864	NA	NOPOP(443) ALL(443)	Parkinson's disease	HPOID:0001300	DOID:14330	NA	
	9	79164646	rs13290974	21423239	0.000963	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA	
RPL31	2	101581246	rs7581886	21423239	0.000505	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NPAS2	
	2	101558904	rs7605570	21423239	0.000831	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NPAS2	
SRPX2	X	99844506	rs5966709	17052657	0.000155	NA	NOPOP(537) ALL(537)	Parkinson's disease	HPOID:0001300	DOID:14330	TNMD	
	X	99845684	rs4828037	17052657	0.000159	NA	NOPOP(537) ALL(537)	Parkinson's disease	HPOID:0001300	DOID:14330	TNMD	
	X	99837874	rs932437	17052657	0.000223	NA	NOPOP(537) ALL(537)	Parkinson's disease	HPOID:0001300	DOID:14330	TNMD	
DPYSL3	5	146831553	rs10056132	21876681	0.000003	NA	EUR(2389) ALL(2389)	Parkinson's disease (interaction with co	HPOID:0001300	DOID:14330	DPYSL3	
	5	146949107	rs10041339	21876681	0.000004	NA	EUR(2389) ALL(2389)	Parkinson's disease (interaction with co	HPOID:0001300	DOID:14330	LOC153469	
TSTA3	8	144636272	rs4874150	17052657	0.000768	NA	NOPOP(537) ALL(537)	Parkinson's disease	HPOID:0001300	DOID:14330	GSDMD	
MYLK	3	123287806	rs1965290	20889312	0.0000439	NA	EUR(4234) ALL(4234)	Bipolar disorder and schizophrenia	HPOID:0007302	DOID:3312	PTPLB	
	3	123351288	rs1254397	21041247	0.000119	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123353741	rs1254401	21041247	0.000119	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123355193	rs820460	21041247	0.000119	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123357037	rs820463	21041247	0.000119	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123357062	rs820464	21041247	0.000119	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123358278	rs1254403	21041247	0.000119	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123362856	rs820470	21041247	0.000119	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123364313	rs820472	21041247	0.00012	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123348776	rs820446	21041247	0.000121	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123336982	rs848145	21041247	0.000123	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123337938	rs820459	21041247	0.000123	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123340878	rs820455	21041247	0.000123	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123369728	rs1254389	21041247	0.000129	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123312228	rs1268623	21041247	0.000654	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK-AS1	
	3	123358278	rs1254403	21041247	0.000776	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123327675	rs4530474	21041247	0.000822	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK-AS1	
	3	123323767	rs848146	21041247	0.000827	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK-AS1	
	3	123329932	rs2626028	21041247	0.000831	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK-AS1	
	3	123323164	rs820479	21041247	0.000836	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK-AS1	
	3	123318520	rs861890	21041247	0.000845	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK-AS1	
	3	123337414	rs860224	21041247	0.000855	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123338457	rs820458	21041247	0.000868	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123347790	rs820448	21041247	0.000945	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123346501	rs820450	21041247	0.000951	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	3	123345389	rs820451	21041247	0.000955	NA	EUR(4390) ALL(4390)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	MYLK	
	BAALC	8	104116112	rs2454025	21423239	0.00005	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA
		8	104118305	rs2454026	21423239	0.0000614	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA
8		104117387	rs979670	21423239	0.0000673	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA	
8		104117511	rs979672	21423239	0.0000705	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA	
8		104322803	rs3107648	21674006	0.000199	NA	ASN(360) ALL(360)	Schizophrenia	HPOID:0100753	DOID:5419	FZD6	
8		104090979	rs2453999	21423239	0.000207	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA	
8		104113007	rs2454018	21423239	0.000221	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA	
8		104113302	rs2454020	21423239	0.000263	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA	
8		104113644	rs2454021	21423239	0.000318	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA	
8		104089618	rs2453998	17052657	0.000377	NA	NOPOP(537) ALL(537)	Parkinson's disease	HPOID:0001300	DOID:14330	NA	
8	104115580	rs2454023	21423239	0.000382	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA		
8	104115614	rs2515212	21423239	0.000441	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA		
8	104109811	rs2515210	21423239	0.000457	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA		
8	104323026	rs827536	21674006	0.000806	NA	ASN(360) ALL(360)	Schizophrenia	HPOID:0100753	DOID:5419	FZD6		
FLRT2	14	86017306	rs1950177	18317468	0.000101	NA	EUR(3469) ALL(3469)	Bipolar disorder	HPOID:0007302	DOID:3312	FLRT2	

	Chromosome	Position	SNP ID	Pubmed ID	P-val	orbeta	super_pop	trait	hpoid	doid	Gene symbol
UGCG	9	114572504	rs17735670	20528957	0.0000169	NA	EUR(755) ALL(755)	Bipolar disorder, affective	HPOID:0007302	DOID:3312	NA
	9	114572011	rs7875230	20528957	0.000093	NA	EUR(755) ALL(755)	Bipolar disorder, affective	HPOID:0007302	DOID:3312	NA
	9	114563069	rs10981079	20528957	0.000113	NA	EUR(755) ALL(755)	Bipolar disorder, affective	HPOID:0007302	DOID:3312	NA
	9	114778046	rs4401941	21423239	0.000453	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA
	9	114618021	rs11788458	20528957	0.000913	NA	EUR(755) ALL(755)	Bipolar disorder, affective	HPOID:0007302	DOID:3312	NA
	9	114637494	rs7026196	20528957	0.000967	NA	EUR(755) ALL(755)	Bipolar disorder, affective	HPOID:0007302	DOID:3312	NA
DSP	6	7668923	rs1885487	21926974	0.000000213	NA	EUR(21856) ALL(21856)	Schizophrenia	HPOID:0100753	DOID:5419	NA
	6	7555854	rs9392904	18317468	0.000283	NA	EUR(3469) ALL(3469)	Bipolar disorder	HPOID:0007302	DOID:3312	DSP
	6	7495756	rs4960327	21423239	0.000509	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA
	6	7495948	rs4960328	21423239	0.000545	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA
	6	7470321	rs11756237	21423239	0.000865	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA
	6	7484005	rs2763123	21423239	0.000875	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA
	6	7473810	rs11243186	21423239	0.000902	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA
	6	7476908	rs2806192	21423239	0.000908	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA
	6	7470873	rs11755831	21423239	0.000922	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA
6	7477213	rs2763119	21423239	0.000963	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	NA	
SLC30A5	5	68455166	rs389686	20800221	0.000751	NA	EUR(4811) ALL(4811)	Depression (quantitative trait)	HPOID:0000716	DOID:1596	NA
MCM10	10	13336952	rs11258312	21423239	0.000797	NA	EUR(2698) ALL(2698)	Suicide attempts in bipolar disorder	HPOID:0007302	DOID:3312	PHYH
PRC1	15	91426560	rs4702	19571808	0.000024	NA	EUR(16161) ALL(16161)	Schizophrenia	HPOID:0100753	DOID:5419	FURIN
IVNS1ABP	10	102016044	rs2270962	pha002850	0.0000461	1.49	ALL(0)	Major depressive disorder	HPOID:0000716	DOID:1470	CWF19L1
FLJ20522 (PIGX)	3	196351215	rs1385331	17052657	0.00017	NA	NOPOP(537) ALL(537)	Parkinson's disease	HPOID:0001300	DOID:14330	NA
QKI	6	163847852	rs783137	17486107	0.0000774	NA	NOPOP(1024) ALL(1024)	Bipolar disorder	HPOID:0007302	DOID:3312	QKI
	6	164008112	rs12208278	21042317	0.00027	NA	EUR(6104) ALL(6104)	Major depressive disorder	HPOID:0000716	DOID:1470	NA

Red: Schizophrenia-associated  
Blue: PD-associated  
Black: depression and bipolar disorder