

**Supplementary Table 1: *TaqMan Low Density Array (TLDA) gene list***

Gene number	Type	Gene Symbol	Reference Life Technologies	
1	Cell Adhesion	<b>Ncam1</b>	Rn00580526 m1	
2		<b>St8sia4</b>	Rn01427310 m1	
3		<b>Gne</b>	Rn00587161 m1	
4	Cytoskeleton	<b>Arc</b>	Rn00571208 g1	
5		<b>Map2</b>	Rn00565046 m1	
6		<b>Gap43</b>	Rn01474579 m1	
7		<b>Gfap</b>	Rn00566603 m1	
8	Neurogenesis	<b>Nes</b>	Rn00564394 m1	
9		<b>Pcna</b>	Rn01514538 g1	
10		<b>Mki67</b>	Rn01451446 m1	
11	Neurotrophin	<b>Bdnf</b>	Rn02531967 s1	
12		<b>Ntrk2</b>	Rn01441749 m1	
13		<b>Cntf</b>	Rn00755092 m1	
14		<b>Ntf3</b>	Rn00579280 m1	
15		<b>Ntrk3</b>	Rn00570389 m1	
16		<b>ret</b>	Rn01463098 m1	
17		<b>Gfra1</b>	Rn01444617 m1	
18		<b>Gdnf</b>	Rn00569510 m1	
19		<b>Igf1</b>	Rn00710306 m1	
20	Synaptogenesis	<b>Snap25</b>	Rn00578534 m1	
21		<b>Syn1</b>	Rn00569468 m1	
22		<b>Syp</b>	Rn00561986 m1	
23		<b>Syt4</b>	Rn01157571 m1	
24	Connexin	<b>Gja1</b>	Rn01433957 m1	
25		<b>Gjd2</b>	Rn00439121 m1	
26	Transcription regulatory	<b>Fos</b>	Rn00487426 g1	
27		<b>FosB</b>	Rn00500401 m1	
28		<b>Socs3</b>	Rn00585674 s1	
29	Dopamine circuits / opioid	<b>Comt</b>	Rn01404927 g1	
30		<b>Slc6a3</b>	Rn00562224 m1	
31		<b>Th</b>	Rn00562500 m1	
32		<b>Ppp1r1b</b>	Rn01452984 m1	
33		<b>DRD1</b>	Rh02902958 m1	
34		<b>Drd1a</b>	Rn03062203 s1	
35		<b>Drd2</b>	Rn00561126 m1	
36		<b>Drd3</b>	Rn00567568 m1	
37		<b>Drd4</b>	Rn00564071 m1	
38		<b>Drd5</b>	Rn00562768 s1	
39		<b>Oprm1</b>	Rn01430371 m1	
40		<b>Penk</b>	Rn00567566 m1	
41		GABA circuit	<b>Slc12a5</b>	Rn00592624 m1
42			<b>Slc12a2</b>	Rn00582505 m1
43			<b>Gabra1</b>	Rn00788315 m1
44			<b>Gabra2</b>	Rn01413643 m1
45	<b>Gabra3</b>		Rn01294271 m1	
46	<b>Gabra4</b>		Rn00589846 m1	
47	<b>Gabra5</b>		Rn00568803 m1	
48	<b>Gabra6</b>		Rn00573029 m1	
49	<b>Gabrb1</b>		Rn00564146 m1	
50	<b>Gabrb2</b>		Rn00564149 m1	
51	<b>Gabrb3</b>		Rn00567029 m1	
52	<b>Gabrd</b>		Rn01517017 g1	
53	<b>Gabrg1</b>		Rn00589841 m1	
54	<b>Gabrg2</b>		Rn00788325 m1	
55	<b>Gabrg3</b>		Rn00577639 m1	
56	<b>Gabre</b>		Rn00576522 m1	
57	<b>Hap1</b>	Rn00577100 m1		

Gene number	Type	Gene Symbol	Reference Life Technologies
58	Hypothalamic circuit	<b>Hcrtr1</b>	Rn00565032 m1
59		<b>Hcrtr2</b>	Rn00565155 m1
60		<b>Ghr1</b>	Rn00572319 m1
61		<b>Ghsr</b>	Rn00821417 m1
62		<b>Cckbr</b>	Rn00565867 m1
63	Homeostasis regulation	<b>InsR</b>	Rn00690703 m1
64		<b>LepR</b>	Rn01433205 m1
65		<b>Npy</b>	Rn01410145 m1
66		<b>Mc4r</b>	Rn01491866 s1
67		<b>Pomc</b>	Rn00595020 m1
68	Endocannabinoid System	<b>Cnr1</b>	Rn02758689 s1
69		<b>Mgl1</b>	Rn00593297 m1
70		<b>Trpv1</b>	Rn00583117 m1
71		<b>Faah</b>	Rn00577086 m1
72	DNA methylation	<b>Dnmt1</b>	Rn00709664 m1
73		<b>Dnmt3a</b>	Rn01027162 g1
74		<b>Dnmt3b</b>	Rn01536418 g1
75	Histone deacetylases	<b>Sirt1</b>	Mm00490758 m1
76		<b>Sirt2</b>	Rn01457502 m1
77		<b>Hdac1</b>	Rn01519309 g1
78		<b>Hdac2</b>	Rn01193634 g1
79		<b>Hdac3</b>	Rn00584926 m1
80		<b>Hdac4</b>	Rn01427040 m1
81		<b>Hdac5</b>	Rn01464245 m1
82		<b>Hdac8</b>	Rn01419046 m1
83	Histone acetyl Transferases	<b>Kat6a</b>	Rn01211941 m1
84		<b>Kat5</b>	Rn01474465 m1
85		<b>Crebbp</b>	Rn00591291 m1
86	Serotonin	<b>Htr1a</b>	Rn00561409 s1
87		<b>Htr1b</b>	Rn01637747 s1
88		<b>Htr2a</b>	Rn00568473 m1
89		<b>Htr2c</b>	Rn00562748 m1
90		<b>Htr6</b>	Rn00577615 m1
91		<b>TPH2</b>	Rn00598017 m1
92		<b>Slc6a4</b>	Rn00564737 m1
93	House keeping genes	<b>Gapdh</b>	Rn01775763 g1
94		<b>Polr2a</b>	Rn01752026 m1
95		<b>Ppia</b>	Rn00690933 m1
96	Life Technologies Standard	<b>18S</b>	