

A

ProbeSet	Gene Symbol	Score	logFC			AveExpr		
			Hi	St	Bs	Hi	St	Bs
1454817_at	Utp18	15.1	4.1E-02	4.9E-02	3.8E-02	8.8	8.5	8.2
1417024_at	Hars	14.2	2.9E-02	3.5E-02	2.7E-02	10.6	10.5	10.7
1452677_at	LOC100044383 /// Pnpt1	13.2	2.0E-01	1.5E-01	1.4E-01	4.0	3.7	4.0
1418072_at	Hist1h2bc /// Hist2h2bb	13.2	-2.8E-02	-4.0E-02	-1.8E-02	12.5	12.8	13.0
1450900_at	Smek2	13.0	5.3E-02	4.7E-02	3.4E-02	10.2	10.1	10.1
1449401_at	C1qc	12.8	-7.4E-02	-6.9E-02	-6.1E-02	8.6	9.3	8.3
1439968_x_at	Dbndd2	12.2	-5.9E-02	-7.9E-02	-7.2E-02	8.3	8.4	9.1
1452540_a_at	bm /// Hist1h2bp /// Hist2h2bb /// LC	12.2	-3.7E-02	-3.7E-02	-1.6E-02	11.5	11.7	12.0
1430577_at	Cep27	12.2	-4.1E-02	-3.9E-02	-3.0E-02	8.0	7.2	8.3
1439032_at	Cep27	12.0	-4.2E-02	-5.2E-02	-2.9E-02	9.3	8.7	9.1
1429862_at	Pla2g4e	12.0	6.6E-02	9.9E-02	9.0E-02	6.0	3.7	4.9
1419903_at	Dbndd2	11.9	-5.4E-02	-6.7E-02	-5.8E-02	8.0	8.8	9.4
1455095_at	Hist2h2be	11.8	-3.7E-02	-4.2E-02	-2.0E-02	7.2	6.5	6.9
1446147_at	Rbm39	11.8	6.3E-02	7.0E-02	6.1E-02	10.8	10.9	10.1
1440771_at	Zkscan1	11.6	9.6E-02	1.1E-01	8.2E-02	7.8	8.4	6.4
1436372_a_at	Pdxdc1	11.6	-4.5E-02	-7.6E-02	-4.8E-02	8.4	8.2	8.9
1446148_x_at	Rbm39	11.5	6.1E-02	6.9E-02	5.6E-02	10.4	10.4	9.9
1439650_at	Rtn4	11.5	-8.9E-02	-5.6E-02	-5.9E-02	8.3	8.6	8.9
1420941_at	Rgs5	11.4	2.9E-02	4.3E-02	2.0E-02	10.1	10.6	10.8
1437308_s_at	F2r	11.4	6.3E-02	1.5E-01	3.0E-02	7.6	6.6	9.7
1440557_at	lpr	11.4	-1.4E-01	-1.4E-01	-1.3E-01	6.5	7.1	8.0
1446265_at	Dnm3	11.3	-1.0E-01	-6.7E-02	-4.4E-02	9.2	10.1	11.2
1456351_at	Brd8	11.3	3.8E-02	5.6E-02	3.3E-02	8.4	8.2	7.7
1455131_at	Opa3	11.3	3.0E-02	2.0E-02	1.9E-02	9.3	8.9	9.4
1421901_at	Eif2ak1	11.3	-2.0E-02	-2.6E-02	-1.8E-02	9.4	9.2	9.8
1434208_at	Rnf169	11.3	-1.1E-01	-7.6E-02	-2.2E-02	7.7	8.3	5.7
1423462_at	Map3k7ip2	11.2	1.2E-02	1.5E-02	1.1E-02	11.6	11.6	11.4
1431042_at	Paqr8	11.2	-4.2E-02	-5.2E-02	-4.0E-02	8.9	8.4	9.6
1456943_a_at	Dbndd2	11.2	-4.8E-02	-5.2E-02	-5.4E-02	8.6	8.9	9.7
1433462_a_at	Pi4k2a	11.2	-9.5E-02	-8.9E-02	-5.3E-02	8.6	8.3	9.0
1417714_x_at	Hba-a1 /// Hba-a2	11.1	8.6E-02	1.0E-01	6.4E-02	9.3	8.9	11.2
1423495_at	Decr2	11.0	7.2E-02	1.1E-01	5.5E-02	9.1	7.6	8.5
1428692_at	Hddc3	10.8	9.3E-02	9.0E-02	8.2E-02	7.8	8.2	8.6
1435203_at	Man2a2	10.8	1.2E-02	1.7E-02	2.3E-02	10.9	11.4	10.6
1427207_s_at	Afg3l2 /// LOC100048880	10.8	9.7E-03	1.7E-02	1.2E-02	10.0	9.8	10.4
1430375_a_at	100039863 /// LOC100039939 /// LC	10.7	-7.6E-02	-6.9E-02	-5.0E-02	10.3	10.6	9.5
1452705_at	Pdxdc1	10.7	-2.6E-01	-2.6E-01	-2.1E-01	7.6	7.4	7.9

B

Transcript	ProbeSet	Brainstem				Hippocampus				Striatum					
		Array vs PCR		Behavior vs PCR		Array vs PCR		Behavior vs PCR		Array vs PCR		Behavior vs PCR			
		Rho	P	Rho	P	Rho	P	Rho	P	Rho	P	Rho	P		
<i>Dnm3</i>	1446265_at	0.2508	0.3155	0.1429	0.8028	1446265_at	-0.2322	0.3538	-0.08571	0.9194	1446265_at	-0.1352	0.5927	0.02857	1
	1425403_at	0.3602	0.1421			1425403_at	-0.1187	0.639			1425403_at	0.007224	0.9773		
	1438801_at	0.3395	0.1681			1438801_at	-0.3106	0.2096			1438801_at	-0.03818	0.8804		
<i>Pdxdc1</i>	1436372_a_at	0.7441	0.0004	-0.6	0.2417	1436372_a_at	0.6739	0.0022	-0.8857	0.0333	1436372_a_at	0.42	0.0827	-0.2571	0.6583
	1452705_at	0.5129	0.0034			1452705_at	0.5273	0.0245			1452705_at	0.451	0.0603		
	1419327_at	-0.5397	0.003			1419327_at	-0.6883	0.0016			1419327_at	-0.4778	0.0449		
<i>Dbndd2</i>	1428200_a_at	0.5191	0.0303			1428200_a_at	0.6471	0.0037			1428200_a_at	0.3189	0.1971		
	1456943_a_at	0.7069	0.001	-0.8286	0.0583	1456943_a_at	0.2157	0.39	-0.2	0.7139	1456943_a_at	0.6904	0.0015	0.4286	0.4194
	1419903_at	0.6533	0.0033			1419903_at	0.2136	0.3947			1419903_at	0.5748	0.0126		
<i>Hist1h2bc</i>	1439968_x_at	0.6594	0.0029			1439968_x_at	0.2693	0.2798			1439968_x_at	0.6161	0.0065		
	1418072_at	0.5521	0.0175	-0.8857	0.0333	1418072_at	0.709	0.001	-0.8857	0.0333	1418072_at	0.5273	0.0245	-0.1429	0.8028
	1420941_at	0.2652	0.2875	-0.1429	0.8028	1420941_at	0.6739	0.0022	0.3714	0.4972	1420941_at	0.2074	0.4089	0.5429	0.2972
<i>Rgs5</i>	1420940_x_at	0.3065	0.2161			1420940_x_at	0.07946	0.754			1420940_x_at	-0.1496	0.5534		
	1420942_s_at	0.1992	0.4282			1420942_s_at	0.0547	0.8293			1420942_s_at	-0.42	0.0827		
	1417466_at	0.2549	0.3073			1417466_at	-0.1538	0.5424			1417466_at	-0.4076	0.0931		

Figure S1. Gene expression array selected results and real-time RT-PCR confirmation of expression.

A) Gene list from microarray analysis. This table lists some of the probe sets with the highest significance scores, linear modelling q-values, fold change differences and average expression levels. Genes highlighted in green are those selected for further study. Log fold change is shown for each brain region (logFC), the calculated score (Score), and average expression levels (AveExpr) for each brain region are shown.

B) Real-time RT-PCR gene expression data vs. microarray expression and PPIc for five genes. Probe sets that were validated with real-time RT-PCR data include *Pdxdc1* (in all three tissues), *Dbndd2* (in two tissues), *Hist1h2bc* (in all three tissues), and *Rgs5* in striatum. Real-time RT-PCR results confirmed array results for behaviour for *Dbndd2* in brainstem, *Hist1h2bc* in brainstem and hippocampus, and for *Pdxdc1* in hippocampus.