

Supplementary Table 4.

List of genes commonly downregulated in the microdissected cerebral white matter region after exposure to DBDE at 100 and 1000 ppm (≤ 0.5 -fold)

Accession no.	Gene title	Symbol	DBDE		
			10 ppm	100 ppm	1000 ppm
Downregulated (224 genes)					
NM_001108395	placenta-specific 9	Plac9	0.97	0.10	0.08
BF411568	EST	–	1.01	0.08	0.10
NM_021580	prolactin family 8, subfamily a, member 4	Prl8a4	0.57	0.12	0.11
NM_019154	amelogenin X chromosome	Amelx	1.22	0.28	0.13
BF393053	EST	–	0.94	0.38	0.13
NM_001024305	PRP38 pre-mRNA processing factor 38 (yeast) domain containing B	Prpf38b	0.72	0.22	0.13
BF544537	EST	–	0.51	0.32	0.14
AI454929	EST	–	0.94	0.15	0.14
NM_052803	ATPase, Cu ⁺⁺ transporting, alpha polypeptide	Atp7a	0.94	0.33	0.16
NM_019161	EST	–	1.02	0.17	0.17
AI111659	EST	–	0.96	0.47	0.17
NM_001173507	stromal antigen 2	Stag2	0.85	0.46	0.17
AW532329	EST	–	0.91	0.46	0.18
NM_001030035	Retinitis pigmentosa GTPase regulator interacting protein 1	Rpgrip1	0.75	0.35	0.18
NM_001034134	eukaryotic translation initiation factor 3, subunit 6 interacting protein	Eif3s6ip	0.97	0.38	0.19
BI291927	EST	–	0.84	0.38	0.19
NM_001106055	MYC binding protein 2	Mycbp2	1.00	0.30	0.19
NM_057203	chemokine (C-C motif) ligand 22	Ccl22	0.74	0.23	0.19
AI638976	EST	–	0.63	0.25	0.20
NM_031664	solute carrier family 28 (sodium-coupled nucleoside transporter), member 2	Slc28a2	1.08	0.12	0.20
BF418003	EST	–	0.90	0.46	0.20
NM_053671	TATA element modulatory factor 1	Tmfl	0.92	0.42	0.20
NM_001134706	nucleosomal binding protein 1	Nsbp1	1.03	0.31	0.20
AW919728	EST	–	1.00	0.38	0.20
NM_022671	one cut homeobox 1	Onecut1	1.21	0.34	0.20
BF418026	EST	–	0.74	0.24	0.20
BI296453	EST	–	0.95	0.27	0.21
AI712467	EST	–	1.24	0.32	0.21
BF413347	EST	–	0.59	0.44	0.22
AI071599	EST	–	1.07	0.28	0.22
NM_001107868	zinc finger, matrin-like	Zfml	0.92	0.36	0.23
AW527234	EST	–	0.65	0.50	0.23
AW921461	EST	–	1.06	0.04	0.23
XR_086345	rCG23949-like	LOC100362458	0.75	0.26	0.23
NM_030584	sclerosteosis	Sost	0.57	0.46	0.23
BG371725	EST	–	1.02	0.24	0.23
NM_181084	tumor protein p53 inducible nuclear protein 1	Tp53inp1	0.88	0.46	0.24
AI577552	EST	–	0.93	0.28	0.24
NM_001024275	Ras association (RalGDS/AF-6) domain family member 4	Rassf4	1.03	0.43	0.25
XM_002726772	mCG147639-like	LOC100363606	1.25	0.17	0.25
AW532375	EST	–	0.94	0.41	0.25
NM_001109260	similar to RIKEN cDNA 3110035E14	RGD1561849	1.04	0.26	0.26
AI029275	EST	–	1.02	0.17	0.26
XR_005460	Similar to 2410024A21Rik protein	RGD1304878	1.58	0.40	0.26
BE110143	EST	–	0.84	0.41	0.26

NM_001025649	transmembrane 9 superfamily protein member 4	Tm9sf4	0.96	0.44	0.26
NM_001106572	olfactomedin-like 2A	Olfml2a	1.01	0.42	0.26
AW253361	EST	–	0.96	0.41	0.26
NM_023962	platelet-derived growth factor, D polypeptide	Pdgfd	0.91	0.42	0.27
AI013758	EST	–	0.94	0.39	0.27
AA944650	EST	–	1.16	0.31	0.27
BM385973	EST	–	0.97	0.31	0.28
BI289090	EST	–	0.87	0.24	0.29
NM_001035000	histone deacetylase 10	Hdac10	1.15	0.33	0.29
BE095613	EST	–	0.90	0.38	0.29
BF400824	EST	–	0.55	0.28	0.29
BF387018	EST	–	0.84	0.35	0.29
NM_022692	RAB5A, member RAS oncogene family	Rab5a	1.04	0.46	0.29
XR_005469	similar to KIAA0339 protein	RGD1311624	0.89	0.45	0.29
NM_001034923	dihydrouridine synthase 3-like	Dus3l	0.85	0.14	0.29
NM_001108485	general transcription factor IIH, polypeptide 1	Gtf2h1	0.81	0.37	0.30
BF568017	EST	–	0.78	0.37	0.30
BI299977	EST	–	0.98	0.29	0.30
NM_001009637	leucyl-tRNA synthetase	Lars	0.98	0.37	0.30
NM_030985	angiotensin II receptor, type 1a	Agtr1a	0.91	0.44	0.30
NM_031610	EST	–	0.84	0.33	0.30
NM_001108564	amylo-1,6-glucosidase, 4-alpha-glucanotransferase	AgI	1.14	0.40	0.30
BI300412	EST	–	0.67	0.33	0.30
NM_001034068	tropomyosin 1, alpha	Tpm1	0.87	0.49	0.30
BE105927	EST	–	0.92	0.41	0.31
NM_053524	NADPH oxidase 4	Nox4	0.67	0.28	0.31
BE119146	EST	–	0.90	0.35	0.31
BF416814	EST	–	0.85	0.50	0.31
BE109223	EST	–	1.10	0.32	0.31
NM_017264	Proteasome (prosome, macropain) activator subunit 1	Psme1	1.04	0.28	0.32
NM_199094	tubulin, beta 2c	Tubb2c	0.95	0.48	0.32
AI071789	EST	–	0.95	0.50	0.32
NM_133295	carboxylesterase 3	Ces3	1.08	0.35	0.32
NM_001008880	sodium channel, voltage-gated, type IV, beta	Scn4b	0.98	0.24	0.32
NM_019188	microseminoprotein, beta	Msemb	0.97	0.31	0.32
BG373926	EST	–	0.63	0.28	0.32
AI169620	EST	–	1.05	0.23	0.32
NM_001006967	lysyl-tRNA synthetase	Kars	0.99	0.45	0.33
AI411637	EST	–	0.51	0.48	0.33
XM_001060853	ATPase, H ⁺ transporting, lysosomal accessory protein 2	Atp6ap2	1.04	0.32	0.33
AA963228	EST	–	1.01	0.28	0.33
NM_017349	FXYD domain-containing ion transport regulator 2	Fxyd2	1.41	0.26	0.34
BM389786	EST	–	0.93	0.42	0.34
BE117531	EST	–	0.80	0.29	0.34
AI010054	EST	–	0.92	0.46	0.34
AA956454	EST	–	1.02	0.31	0.34
XM_001060944	annexin V-binding protein ABP-10	Abp10	0.95	0.25	0.34
NM_019328	nuclear receptor subfamily 4, group A, member 2	Nr4a2	0.93	0.47	0.34
BE119312	EST	–	0.88	0.13	0.34
NM_053426	Splicing factor 3b, subunit 1	Sf3b1	0.68	0.42	0.34
NM_021693	salt-inducible kinase 1	Sik1	0.91	0.13	0.35

AI072025	EST	–	0.77	0.25	0.35
BF413539	EST	–	0.91	0.32	0.35
BI299522	EST	–	1.11	0.23	0.35
XM_002725785	damage-specific DNA binding protein 1	Ddb1	0.86	0.35	0.35
NM_001112742	glutamate receptor, ionotropic, AMPA 3	Gria3	1.03	0.33	0.35
NM_001109023	pinin, desmosome associated protein	Pnn	1.07	0.48	0.35
XM_001070053	kinesin family member 1A	Kif1a	0.94	0.18	0.35
AI639055	EST	–	1.02	0.20	0.36
NM_145721	CDK5 regulatory subunit associated protein 1	Cdk5rap1	0.78	0.40	0.36
BF400127	EST	–	0.96	0.41	0.36
XM_001073918	ferric-chelate reductase 1	Frrs1	0.79	0.45	0.36
AI136271	EST	–	1.02	0.39	0.36
NM_019315	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 3	Kcnn3	0.94	0.40	0.36
AI029721	EST	–	0.88	0.42	0.37
AI072270	EST	–	0.99	0.40	0.37
BF403095	EST	–	0.94	0.24	0.37
NM_001124768	tachykinin 1	Tac1	1.25	0.38	0.37
NM_001195606	hypothetical protein LOC686032	LOC686032	0.74	0.28	0.37
BF404462	EST	–	1.00	0.43	0.37
BF290198	EST	–	0.63	0.38	0.37
BE121123	EST	–	0.61	0.42	0.37
NM_001105929	zinc finger, CCHC domain containing 8	Zcchc8	1.10	0.43	0.38
BF398283	EST	–	1.14	0.50	0.38
NM_001106548	hypothetical LOC296411	RGD1307805	1.00	0.28	0.38
BI296717	EST	–	0.96	0.49	0.38
NM_053903	ephrin A5	Efna5	0.84	0.39	0.38
NM_031665	syntaxin 6	Stx6	1.04	0.36	0.38
BE120096	EST	–	1.00	0.49	0.38
XM_001055673	similar to SWI/SNF-related matrix-associated actin-dependent regulator of chromatin c2	LOC685179	1.73	0.45	0.39
NM_001039026	ubiquitin protein ligase E3 component n-recognin 4	Ubr4	0.97	0.50	0.39
BF284365	EST	–	1.03	0.37	0.39
AI511079	EST	–	0.78	0.40	0.39
AI548586	EST	–	0.73	0.31	0.39
AW251280	EST	–	0.77	0.23	0.39
NM_001007623	methyltransferase like 6	Mettl6	1.21	0.29	0.39
BE117956	EST	–	1.09	0.22	0.39
NM_001108378	short chain dehydrogenase/reductase family 39U, member 1	Sdr39u1	0.83	0.38	0.40
NM_012645	RT1 class Ib, locus EC2	RT1-EC2	1.02	0.36	0.40
BG666316	EST	–	1.00	0.50	0.40
NM_001106592	zinc finger protein 282	Znf282	0.51	0.34	0.40
BF283568	EST	–	1.01	0.27	0.40
AW534476	EST	–	0.88	0.44	0.41
NM_133413	cysteinyl leukotriene receptor 2	Cysltr2	0.83	0.47	0.41
BE111740	EST	–	0.67	0.29	0.41
NM_053927	erythrocyte protein band 4.1-like 3	Epb4.113	0.68	0.41	0.41
AI601993	EST	–	0.90	0.35	0.41
NM_138902	eosinophil-associated, ribonuclease A family, member 11	Ear11	0.93	0.32	0.41
NM_001008843	RT1 class I, locus CE5	RT1-CE5	1.04	0.15	0.41
XM_001065262	similar to hypothetical protein	RGD1563056	0.91	0.35	0.41
XM_001058877	DAZ interacting protein 3, zinc finger	Dzip3	0.69	0.37	0.42

NM_053817	neurexin 3	Nrxn3	1.09	0.49	0.42
AA998248	EST	–	1.05	0.46	0.42
NM_053457	claudin 11	Cldn11	0.99	0.49	0.42
BE099838	EST	–	1.00	0.40	0.42
NM_153821	paired related homeobox 1	Prrx1	0.77	0.29	0.42
BI298185	EST	–	0.55	0.42	0.42
AI554998	EST	–	1.81	0.49	0.42
NM_001037650	nephronophthisis 4 (juvenile) homolog	Nphp4	0.63	0.49	0.43
NM_013107	Bone morphogenetic protein 6	Bmp6	1.60	0.48	0.43
XM_002725812	mCG1051031-like	LOC100364485	1.21	0.42	0.43
NM_031115	secretin receptor	Sctr	1.01	0.48	0.43
XM_001078360	SRY (sex determining region Y)-box 21	Sox21	1.21	0.14	0.43
BF386350	EST	–	0.97	0.11	0.43
BF400716	EST	–	0.87	0.48	0.43
NM_001011943	oligonucleotide/oligosaccharide-binding fold containing 1	Obfc1	0.96	0.26	0.43
AI409359	EST	–	1.16	0.35	0.43
AI137489	EST	–	1.20	0.50	0.43
NM_001107477	zinc finger protein 329	Zfp329	0.98	0.26	0.44
NM_001109137	tubby like protein 4	Tulp4	1.02	0.48	0.44
BM392272	EST	–	0.97	0.36	0.44
NM_019374	prodynorphin	Pdyn	0.95	0.49	0.44
BE120205	EST	–	0.98	0.48	0.44
XM_002726225	similar to fatty acid desaturase 2; linoleoyl-CoA desaturase (delta-6-desaturase)-like 2; delta-6 fatty acid desaturase	RGD1311224	1.04	0.50	0.44
BI291351	EST	–	0.97	0.10	0.44
NM_022219	fucosyltransferase 4 (alpha (1,3) fucosyltransferase, myeloid-specific)	Fut4	0.93	0.36	0.44
BF289978	EST	–	0.80	0.48	0.44
AW526150	EST	–	1.00	0.37	0.44
NM_001105993	glomulin, FKBP associated protein	Glmn	0.58	0.30	0.44
AI556222	EST	–	0.67	0.34	0.45
NM_173140	crystallin, beta A2	Cryba2	1.28	0.27	0.45
NM_001014017	zinc finger protein 819	Zfp819	1.52	0.46	0.45
NM_001107809	Zinc finger protein 512B	Znf512b	0.86	0.50	0.45
AW254395	EST	–	0.93	0.42	0.45
BG670822	EST	–	0.82	0.43	0.45
NM_001107103	receptor-interacting serine-threonine kinase 4	Ripk4	0.73	0.47	0.45
BG378170	EST	–	0.97	0.33	0.46
NM_001106779	neural precursor cell expressed, developmentally down-regulated 1	Nedd1	1.01	0.47	0.46
NM_017054	thromboxane A2 receptor	Tbxa2r	0.96	0.41	0.46
BF404834	EST	–	1.01	0.49	0.46
NM_030871	phosphodiesterase 1A, calmodulin-dependent	Pde1a	1.55	0.22	0.46
NM_001012168	tubby-like protein 2	Tulp2	1.30	0.44	0.46
NM_001024305	PRP38 pre-mRNA processing factor 38 (yeast) domain containing B	Prpf38b	1.06	0.29	0.46
NM_001191093	Ring finger protein 150	Rnf150	1.03	0.49	0.46
NM_012547	dopamine receptor D2	Drd2	1.08	0.46	0.46
BF409020	EST	–	1.04	0.49	0.46
NM_001107199	potassium channel tetramerisation domain containing 3	Kctd3	1.58	0.28	0.46
BM386499	EST	–	0.67	0.37	0.46
BF284363	EST	–	0.96	0.36	0.46
NM_001106964	transducin (beta)-like 1 X-linked	Tbl1x	0.98	0.34	0.47

NM_031150	zona pellucida glycoprotein 2 (sperm receptor)	Zp2	1.33	0.29	0.47
BE108111	EST	–	0.91	0.43	0.47
AA850773	EST	–	1.00	0.43	0.47
XM_001071108	ribosomal RNA processing 1 homolog B	Rrp1b	0.97	0.25	0.47
BF567806	EST	–	1.23	0.33	0.48
BF288188	EST	–	0.93	0.37	0.48
NM_001105723	upstream binding transcription factor, RNA polymerase I	Ubtf	1.11	0.43	0.48
AI501207	EST	–	1.06	0.50	0.48
BG670822	EST	–	0.78	0.49	0.48
NM_172222	complement component 2	C2	0.97	0.35	0.48
BM385905	EST	–	0.99	0.44	0.48
NM_053781	aldo-keto reductase family 1, member B7	Akr1b7	1.02	0.17	0.48
AI554981	EST	–	0.99	0.20	0.48
AA943846	EST	–	1.11	0.38	0.48
NM_012587	integrin-binding sialoprotein	Ibsp	1.17	0.17	0.48
BF390674	EST	–	1.10	0.40	0.48
NM_001024749	similar to RIKEN cDNA 3110040N11	RGD1305713	1.14	0.41	0.48
BF401679	EST	–	1.06	0.32	0.49
AI547999	EST	–	1.25	0.42	0.49
XM_002727559	rCG36307-like	LOC100365336	1.12	0.29	0.49
AI180454	EST	–	1.02	0.44	0.49
NM_001107750	tetraspanin 18	Tspan18	0.99	0.44	0.49
AI548961	EST	–	0.89	0.31	0.49
NM_001014092	progesterone and adipoQ receptor family member V	Paqr5	1.23	0.29	0.49
NM_001107523	chromodomain helicase DNA binding protein 2	Chd2	1.25	0.31	0.50
NM_012800	purinergic receptor P2Y, G-protein coupled, 1	P2ry1	1.21	0.45	0.50
NM_001106986	NADPH oxidase organizer 1	Noxo1	0.80	0.31	0.50
AA943744	EST	–	1.01	0.37	0.50
AI556780	EST	–	0.90	0.42	0.50

DBDE, decabromodiphenyl ether; EST, expressed sequence tag.