

Table 7. Genes In Functional Groups Of Interest from Whole Dataset (Categories I-IV)

Accession Numbers	Gene / Name	Brain Region (Drug-Category)	Accession Numbers	Gene / Name	Brain Region (Drug-Category)
NEUROTRANSMITTERS			CELLULAR MECHANISMS (CONT.)		
GABA			S-adenosyl methionine (SAME) related genes		
	<u>Up</u>			<u>Up</u>	
AW120565	SLC6A11 (GAT3) solute carrier family 6 member 1	NA (I)	AI837110	HRMT1L2 hnRNP methyltransferase-like 2, PRMT1	NA (II)
U14420	GABRB3 gamma-aminobutyric acid (GABA) A receptor, beta 3	CP (VPA-IV)	Z23077	AMD1 S-adenosylmethionine decarboxylase 1	PFC (VPA-IV) CP (VPA-IV)
M62374	GABRG2 gamma-aminobutyric acid (GABA) A receptor, gamma2	CP (VPA-IV)	Transporters		
AI606317	GABRA4 gamma-aminobutyric acid (GABA) A receptor, alpha 4	PFC (METH-IV)		<u>Up</u>	
Glutamate			AA062013	SLC25A5 solute carrier family 25 (adenine nucleotide translocator), member 5	CP (VPA-IV)
	<u>Up / Down</u>		M75135	GLUT3 SLC2A3 solute carrier family 2 (facilitated glucose transporter), member 3	CP (VPA-IV)
D10011	GRIK5 glutamate receptor, ionotropic, kainate 5	AMY(VPA-IV) / CP (METH-IV)		<u>Down</u>	
	<u>Up</u>		AF020195	SLC4A4 Pancreas sodium bicarbonate cotransporter	AMY(VPA-IV) CP(VPA-IV)
AI847120	GRIN1 glutamate receptor, ionotropic, N-methyl D-aspartate 1	CP (IV-VPA)	CELL COMPARTMENTS		
	<u>Down</u>		Synaptic		
AI848384	GLUL glutamate-ammonia ligase (glutamine synthase)	VT (II) PFC (METH-III)		<u>Up / Down</u>	
X57497	GRIA1 glutamate receptor, ionotropic, AMPA 1	VT (METH-IV)	D37792	SYT1 Synaptotagmin 1	CP (II), VT (VPA-IV) / AMY (VPA-IV)
AV004774	GRM3 glutamate receptor, metabotropic 3	PFC (VPA-III)	U60150	VAMP2 Synaptobrevin	CP (VPA-IV) / AMY (VPA-III)
Serotonin				<u>Up</u>	
	<u>Up</u>		X95818	SYP Synaptophysin	AMY (VPA-III)
M63685	5HT2C 5-hydroxytryptamine (serotonin) receptor 2C	CP (METH-IV)		<u>Down</u>	
Dopamine			AW122328	NPTX1 neuronal pentraxin 1	CP (II)
	<u>Up</u>		Golgi/ER		
AJ238309	DAT (SLC6A3) solute carrier family 6 (dopamine transporter)	VT (METH-IV)		<u>Up / Down</u>	
Cholinergic			AI838022	ARF3 ADP-ribosylation factor 3	CP(VPA-IV) / AMY(VPA-III)
	<u>Up</u>		AI841733	PCSK1N proprotein convertase subtilisin/kexin type 1 inhibitor	AMY(VPA-IV) / CP(METH-IV)
J04192	CHRM1 cholinergic receptor, muscarinic 1	CP (VPA-IV)		<u>Up</u>	
Adenosine			AI849207	GORASP2 Golgi assembly stacking protein 2	AMY (II)
	<u>Down</u>		AB015426	FUT9 fucosyltransferase 9	CP (METH-IV)
Y13344	ADORA2A adenosine A2a receptor	NA (METH-IV)	AW227412	GOLPH3 golgi phosphoprotein 3 (coat-protein)	CP (VPA-IV)
Glycine			AI154073	SNX1 sorting nexin 1	CP (VPA-IV)
	<u>Up</u>		AI847496	SNX5 sorting nexin 5	CP (VPA-IV)
X81202	GLRB glycine receptor, beta	CP (METH-IV)		<u>Down</u>	
Neuropeptide			X80502	SIAT8C sialyltransferase 8C	VT (METH-IV)
	<u>Up</u>		X84037	MG-160 GLG1 golgi apparatus protein 1	VT (VPA-III)
D17584	TAC1 Tachykinin 1 - substance P - tachykinin, precursor 1	PFC (I)	AI836688	FBXW7 F-box and WD-40 domain protein 7	AMY (VPA-IV)
AV372577	NPY2R neuropeptide Y receptor Y2	NA (METH-III)	AI450216	NAPG N-ethylmaleimide attachment protein gamma	AMY (VPA-IV)
AI322575	CART cocaine- and amphetamine-regulated transcript	VT (METH-IV)	PHYSIOLOGICAL FUNCTIONS		
	<u>Down</u>		Pain pathways		
X59520	CCK Cholecystokinin	CP (II) NA (METH-IV)		<u>Up</u>	
AB010149	ADCYAP1 adenylate cyclase activating polypeptide 1 (pituitary)	VT (VPA-IV)	D17584	TAC1 Tachykinin 1 - substance P - tachykinin, precursor 1	PFC (I)
CELLULAR MECHANISMS			M55181	PENK Preproenkephalin 2	PFC (I)
DARPP-32 pathway			Inflammatory pathways		
	<u>Up</u>			<u>Up/Down</u>	
AI839758	DARPP-32-PPP1R1B protein phosphatase 1, regulatory subunit 1B	PFC (I)	AB005664	MAPK9 mitogen-activated protein kinase 9/JNK2	CP(VPA-III) / AMY(VPA-IV)
AI850402	PPP1R16B protein phosphatase 1, regulatory (inhibitor) subunit 16B	AMY (VPA-IV)	Cell survival / death		
M27073	PPP1CB protein phosphatase 1, catalytic subunit, beta isoform	CP (METH-IV)		<u>Up / Down</u>	
AA764532	PPP2R5A protein phosphatase 2, regulatory subunit B, alpha isoform	CP (VPA-IV)	AF058799	14-3-3 YWHAG - tyrosine 3-monoxygenase/tryptophan 5-monoxygenase activation protein, gamma polypeptide	CP (VPA-IV), VT (VPA-IV) / AMY (VPA-IV)
	<u>Down</u>		U58513	ROCK-2 Rho-associated, coiled-coil containing protein kinase 2	PFC(VPA-III)/AMY(VPA-IV)
AI430766	PPP1R12A protein phosphatase 1, regulatory (inhibitor) subunit 12A	AMY (VPA-IV) CP (VPA-IV)		<u>Up</u>	
Clock genes			X81580	IGFBP2 insulin-like growth factor binding protein 2	CP (METH-III)
	<u>Up / Down</u>		X66449	S100A6 S100 calcium binding protein A6 (calyculin)	CP (METH-III)
AI846289	CSNK1D casein kinase 1, delta	CP (VPA-IV) / AMY (VPA-III)	D90225	PTN pleiotrophin	CP (METH-IV)
AB003433	CRY2 -Cryptochrome 2	CP (VPA-IV) / AMY (VPA-III)	M20473	PRKAR1b protein kinase, cAMP-dependent, regulatory, type I, beta	CP (VPA-IV)
	<u>Down</u>		AI314322	PRKAR2b protein kinase, cAMP-dependent, regulatory, type II, beta	CP (VPA-IV)
AI837830	MOP3-BMAL1 - Brain and muscle ARNT-like 1	PFC (METH-IV)		<u>Down</u>	
AI788757	CCR4 - nocturnin - chemokine (C-C motif) receptor 4	AMY (VPA-III)	AW121087	GSK3B Glycogen synthase kinase 3 beta	PFC (METH-IV) CP (VPA-IV)
G-protein coupled receptors related genes			AI507519	DAPK1 death-associated protein kinase 1	AMY (VPA-III)
	<u>Up / Down</u>		X55573	BDNF brain-derived neurotrophic factor	PFC (METH-IV)
AI845935	GNB1 guanine nucleotide binding protein (G protein), beta polypeptide 1	AMY (VPA-IV) / CP (VPA-IV)	AV102186	BAD BCL2-antagonist of cell death	AMY (VPA-IV)
	<u>Up</u>		AI854469	SON SON DNA binding protein	AMY (VPA-III)
AI852526	GPR88 G-protein coupled receptor 88	PFC (I)	Oxidative stress		
AI841629	GNAI2 Guanine nucleotide-binding protein G(i), alpha-2 subunit	NA (METH-III)		<u>Up</u>	
AB004315	RGS4 regulator of G-protein signalling 4	CP (VPA-IV)	M35725	SOD1 Cu-Zn superoxide dismutase	AMY (VPA-III)
AI850107	GNNG7 guanine nucleotide binding protein (G protein), gamma 7 subunit	PFC (METH-III)	Glia / Myelin		
Inositol pathway				<u>Down / Up</u>	
	<u>Up</u>		M16472	PLP1 Mouse proteolipid protein variant DM-20 mRNA	AMY (VPA-III) / CP (VPA-IV)
AI747899	PITPNB phosphatidylinositol transfer protein, beta	CP (II)		<u>Up</u>	
U32329	EDNRB endothelin receptor type B	CP (METH-III)	U81317	MOBP myelin-associated oligodendrocytic basic protein	CP (II) VT (VPA-IV)
M21530	ITPR1 inositol 1,4,5-trisphosphate receptor, type 1	CP (VPA-IV)	X02801	GFAP glial fibrillary acidic protein	CP (METH-IV) NA (METH-IV)
AB009615	PIP5K2A phosphatidylinositol-4-phosphate 5-kinase, type II, alpha	VT (VPA-IV)	U19582	CLDN11 Oligodendrocyte specific protein	CP (II)
	<u>Down</u>		U48896	UGT8 UDP-glucuronosyltransferase 8	CP (II)
AW124994	SYNJ1 synaptotagmin 1 Inositol 5-phosphatase	AMY (VPA-IV)	Z38110	PMP22 peripheral myelin protein 22	CP (METH-IV)
AW123736	PIP5K1C phosphatidylinositol-4-phosphate 5-kinase, type I, gamma	CP (METH-IV)	M31811	MAG myelin associated glycoprotein	CP (METH-IV)
PKC pathway				<u>Down</u>	
	<u>Up / Down</u>		X16645	AMOG ATPase, Na+/K+ transporting, beta 2 polypeptide	AMY (VPA-IV)
AF058799	14-3-3 YWHAG - tyrosine 3-monoxygenase/tryptophan 5-monoxygenase activation protein, gamma polypeptide	CP (VPA-IV), VT (VPA-IV) / AMY (VPA-IV)	AI159117	GMFB glia maturation factor, beta	AMY (VPA-IV)
Phosphatidic acid pathway					
	<u>Up</u>				
U89352	LYPLA1 Lysophospholipase I	CP (I)			

Additional Evidence: ■ Linkage ■ Postmortem