

Supplementary Table 6. Groups of molecules and genes altered in both postmortem brains and the dentate gyrus (DG) and hippocampus (HC) of Shn-2 KO mice.

	DG Microarray (schizophrenia)		DG Genechip		DG Proteome		HC Genechip		HC Proteome	
	Altar et al.	Shn2 KO mice	P value	Fold Change						
Aldo-Keto Reductase	AKR1A1	Akr1b3			0.0057	1.4	0.0276	-1.05		
	AKR1B1	Akr1a4					0.0254	-1.05		
		Akr1c18	0.0038	1.27			0.0216	1.36		
		Akr1							0.0370	-1.21
		Aldoa							0.0100	1.17
ATP related	ATP6V1E1	Atp6v1a			3.60E-04	1.46				
	ATP5A1	Atp5a1			0.0026	-1.17			0.0260	1.13
	ATP1B1	Atp6v1b2			0.0014	1.42				
		Atp2b2	0.0014	1.36						
		Atp5k			0.0042	-1.99			1.70E-03	-1.66
		Atp5f1/Psmb1			0.0073	-1.10				
		Atp5d			0.032	-1.15			0.0200	-1.31
		Atp6v1g2					0.0118	1.06		
		Atp6v0e2					0.0120	1.06		
		Atp6v1e1					0.0242	1.05		
		Atp6v0d2					0.0483	-1.21		
		Atp5g3					0.0123	-1.06		
		Atp5h					0.0350	-1.07		
		Atp11c		4.00E-04	1.33					
		Atp2b3		0.0016	1.30					
		Atp2c1		5.30E-06	-1.25					
	Atp2a3		4.00E-04	1.22						
	Atp6v1g1		4.50E-07	1.21						
Cytochrome related	UQCRFS1	Uqcrfs1			0.02	-1.12			0.0180	-1.41
		Ubcrc2			0.008	-1.17				
	CYC1	Cyc1					0.0325	-1.08		
	SCO1	Cox5b			4.20E-04	1.40				
	COX7A2	Uqcrb			0.01	1.17				
	CYB5R3	Uchl1			0.00073	1.4			0.0480	1.12
		Cyp3a13					0.0025	1.11		
		Cybrd1					0.0030	1.65		

		Cyba				0.0195	1.31		
		Cyb561	0.0049	-1.28					
		Uqcrh				0.0470	-1.08		
Glucose phosphate isomerase	GPI	Gpi1			0.013	-1.10	0.0491	-1.03	
NADH dehydrogenase	NDUFB2	Ndufa10			2.60E-04	-1.15	0.0417	1.12	
	NDUFB5								
	NDUFS4								
		Ndufs1						0.0350	-1.17
		Ndufs8						0.0420	-1.09
Phosphoglycerate related	PGAM1							0.0030	-1.17
		Pgk1			0.033	-1.06			
		Phgdh	0.0022	-1.44			0.0393	-1.10	0.0320
Proteasome	PSMC6	PsmA6			0.04	-1.05			
	PSMD8	PsmB5			2.90E-05	-1.16			
	PSMD9	PsmB1 / Atp5f1			0.0073	-1.10			
	PSME1	PsmB8					0.0386	1.23	
	PSMA1	PsmG2	2.30E-04	-1.27					
	PSMB6								
Ubiquitin related	UCHL1	Uchl1			7.30E-04	1.40		0.0480	1.12
	UBB	Ubb						0.0054	-1.60
	UBE2D1	Uchl3					0.0120	-1.25	
	UBL4A	Usp22					0.0017	1.15	
		Usp29	6.60E-06	1.90			0.0034	1.18	
		Ubl5					0.0042	1.38	
		Ube2I3					0.0105	1.10	
		Ube2b					0.0116	-1.06	
		Usp22					0.0130	1.14	
		Ube2d2					0.0140	1.09	
		Ube2e2					0.0168	1.17	
		Usp38					0.0192	1.15	
		Usp16					0.0220	1.14	
		Usp40					0.0391	-1.24	
		Wwp2					0.0444	-1.18	
		Usp39					0.0476	1.05	
		Usp25					0.0487	1.17	
		Ups48	0.0035	1.21					

		Usp27x	0.0049	1.27		
		Ube2v2	0.0006	1.24		
		Uhrf2	0.0020	-1.27		
		Hace1	0.0013	-1.43		
		Nub1	0.0050	1.22		
Calbindin	CALB1	Calb1	0.0010	-5.36		1.42E-05 -2.02
Syntaxin related	STX8	Stx18			0.0031	1.23
		Stxbp6				0.0123 1.32
		Stx6	0.0029	1.28		0.0337 1.13
		Stx4a				0.0342 -1.19
		Stx2	0.0029	-1.45		
		Stxbp3a	0.0010	1.42		
		Stxbp1	0.0002	1.24		

Downregulated genes or proteins

Upregulated genes or proteins

Genes or proteins whose direction of the regulation is not consistent in Shn-2 KO mice