

Figure e-1. Western blot analysis of PRG5 and PRG1 antibodies.

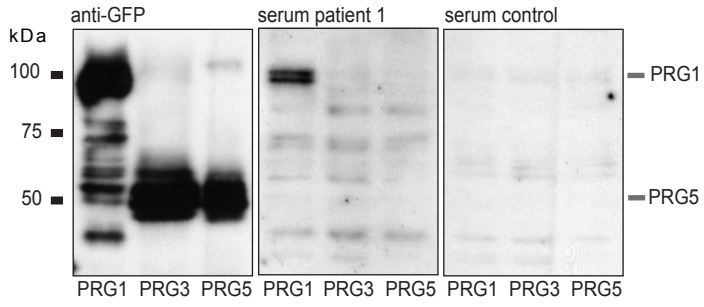


Figure e-2. Purified IgGs integrity test.

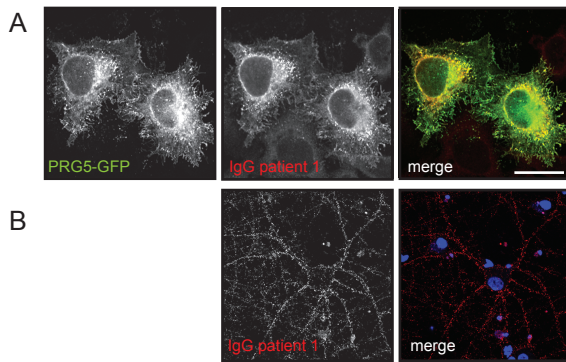
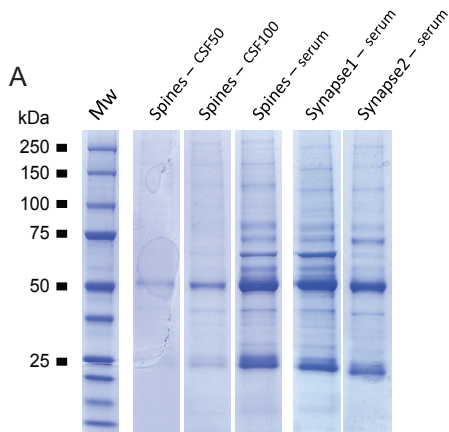


Figure e-3. Mass spectrometry gel and analysis list.



accession	Unique peptides						synonyms ncbi	length	Mascot score				
	Spines - CSF50	Spines - CSF100	Spines - serum	Synapse1 - serum	Synapse2 - serum	symbol			description	Spines - CSF50	Spines - CSF100	Spines - serum	Synapse1 - serum
G3V864	19	23	20			Lppr4	Lipid phosphate phosphatase-related protein type 4	FRG1	766	1153	1419	1155	
F1LZ36		12	16			Tenn4	Protein Odz4	ODZ4	2793		421	683	
F1LPK4		10	8		2	Gria2	Glutamate receptor 2		920		424	318	114
F1LYN2		4	7			Tenn1	Uncharacterized protein	ODZ1	2552		135	350	
R46101		9	5			Dpp6	Dipeptidyl aminopeptidase-like protein 6	DFP6/DFPX	859		430	235	
F1LNN7	4	8	4			Ncan	Neurocan core protein		1258	119	337	148	
B2RZ37			4	2		Reep5	Receptor expression-enhancing protein 5	Dp1	189		159	92	
Q499T3		3	4			Sirpa	Sirpa protein		513		99	134	
Q62640			4			Grid1	Glutamate receptor delta-1 subunit		1009			139	
P22963	5	9	3		1	Cntn2	Contactin-2	TAG1/TAX1	1040	185	460	170	55
P35439	4	9	3		2	Grin1	Glutamate (NMDA) receptor subunit zeta-1	NMDAR1, NR1	938	164	336	116	90
F1LR33	3	6	3			Lppr2	Lipid phosphate phosphatase-related protein type 2	FRG4	452	188	285	209	
Q7TMB0	2	9	2			Lppr3	Lipid phosphate phosphatase-related protein type 3	FRG2	716	113	397	122	
G3VQM3	2	2				Lppr5	Lipid phosphate phosphatase-related protein type 5	FRG5	316	76	82		
F1LR11		2				Lppr1	Lipid phosphate phosphatase-related protein type 1	FRG3	325		96		