

Primary antibodies			
Antibody	Dilution	Manufacturer	Catalog number
Mouse anti-Gephyrin	1:500 (IF-m)	Synaptic Systems	147011
Mouse anti-NeuN (clone A60)	1:250 (IF-m)	Merck Millipore	MAB377
Mouse anti-Parvalbumin	1:300 (IF-m)	Synaptic Systems	195011
Rabbit anti-AIF-1	1:300 (IF-m)	Invitrogen	PA5-21274
Rabbit anti-Calbindin	1:300 (IF-m)	Merck Millipore	ABN2192
Rabbit anti-GFAP	1:400 (IF-m)	Abcam	Ab16997
Rat anti-Somatostatin-28	1:300 (IF-m)	Synaptic Systems	366017
Goat anti-VGLUT1	1:300 (IF-m); 1:1000 (WB)	Synaptic Systems	135 307
Rabbit anti-PSD-95	1:200 (IF-m); 1:1000 (WB)	Abcam	18258
Rabbit anti-VGAT	1:300 (IF-m); 1:500 (IF-h); 1:1000 (WB)	Synaptic Systems	131 002
Rabbit anti-Synaptophysin	1:1000 (WB)	Abcam	14692
Sheep anti-CDKL5	1:1000 (WB)	University of Dundee	SA145

Secondary antibodies			
Antibody	Dilution	Manufacturer	Catalog number
anti-goat Alexa Fluor 594-conjugated	1:200 (IF-m)	Invitrogen	A11058
anti-mouse Alexa Fluor 555-conjugated	1:200 (IF-m)	Invitrogen	A21422
anti-rabbit Alexa Fluor 488-conjugated	1:200 (IF-m)	Invitrogen	A21206
anti-rabbit Alexa Fluor 555-conjugated	1:200 (IF-m)	Invitrogen	A21428
anti-rabbit Cy3-conjugated	1:1000 (IF-h)	Jackson ImmunoResearch	711-165-152
anti-rat Cy3-conjugated	1:200 (IF-m)	Jackson ImmunoResearch	112-165-143
anti-goat HRP-conjugated	1:5000 (WB)	Jackson ImmunoResearch	705-035-147
anti-rabbit HRP-conjugated	1:5000 (WB)	Jackson ImmunoResearch	111-035-003
anti-sheep HRP-conjugated	1:5000 (WB)	Jackson ImmunoResearch	713-035-003

Table S1. List of primary and secondary antibodies. Abbreviations: IF-m = immunofluorescence in mouse brain tissue; IF-h = immunofluorescence in human brain tissue; WB = western blotting.