

# Supplementary Table

Methods		Floating (Normal) Figs. 4, 6 and Supp. Figs. 2, 3, 4	Floating (CaMKII or GABA & GFP) Fig. 1 and Supp. Fig. 1	Cryostat (Ankyrin G) Fig. 5
Post-fix		4% PFA (1-overnight) at 4°C		4% PFA (4hr) at 4°C 25% sucrose in PBS (2-overnight)
Brain slice	Thickness	50 µm		20 µm
	Equipment	Vibratome (VT1000S, Leica)		Cryostat (CMS3050S, Leica)
Permeabilization and blockade	Blocking solution	PBS 5% normal donkey serum 0.5% tritonX-100 0.05% NaN <sub>3</sub>		PBS 2% fish collagen peptide 0.2% tritonX-100
	Duration	30 min	90 min	30 min
Primary antibody reaction	Antibodies (Dilution)	Goat polyclonal anti-parvalbumin (1:200) Rat monoclonal anti-somatostatin (1:100) Goat polyclonal anti-Ankyrin G (1:50) Mouse monoclonal anti-calbindin (1:500) Mouse monoclonal anti-mGluR2 (1:1000)	Mouse monoclonal anti-CaMKII (1:100) Rat monoclonal anti-GFP (1:1000) Rabbit polyclonal anti-GABA (1:1000)	Goat polyclonal anti-Ankyrin G (1:50)
	Solution component	PBS 5% normal donkey serum 0.5% tritonX-100 0.05% NaN <sub>3</sub>	PBS 10% normal donkey serum 3% bovine serum albumin 0.05% NaN <sub>3</sub>	PBS 2% fish collagen peptide 0.2% tritonX-100
	Reaction time	1-overnight at 4°C	2-overnight at room temperature	1-overnight at 4°C
Washing before secondary antibody reaction		PBS with 0.5% TritonX-100 (2 times) PBS with 0.1% TritonX-100 (3 times)	PBS (4 times)	PBS (rinse 1 time)
Secondary antibody reaction	Dilution	1:1000		1:200
	Antibodies	Alexa Fluor 488-donkey anti-rat IgG Alexa Fluor 568-donkey anti-mouse IgG Alexa Fluor 594-donkey anti-rat IgG Alexa Fluor 647-donkey anti-goat IgG Alexa Fluor 647-donkey anti-mouse IgG	Alexa Fluor 488-donkey anti-rat IgG Alexa Fluor 647-donkey anti-mouse IgG Alexa Fluor 647-donkey anti-rabbit IgG	Donkey anti-Goat IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 647
	Solution component	Same as the primary antibody solution		
	Reaction time	1-overnight at 4°C	6 hr at room temperature	1 hr at room temperature
Washing before mounting		PBS with 0.5% TritonX-100 (2 times) PBS with 0.1% TritonX-100 (3 times) PBS (2 times)	PBS (5 times)	
Mounting medium		Prolong Gold/Diamond Antifade Reagent		CC/Mountant antifade reagent

PFA: Paraformaldehyde phosphate buffer; PBS: Phosphate-buffered saline