

Additional File 3. Average (mean $\pm$ SEM) index of curvature of PSD from excitatory synapses in stratum radiatum of the CA1 region of hippocampal slice cultures.

exp	control	30'' K ⁺	1' K ⁺	2' K ⁺	3' K ⁺	K ⁺ + 1' recovery	K ⁺ + 5' recovery	K ⁺ + 10' recovery
1	2.6 $\pm$ 1.2 [-13, 14]	10.0 $\pm$ 1.2 [-8, 31]		14.3 $\pm$ 2.1 [-6, 67]				
2	-3.1 $\pm$ 1.6 [-23, 13]				10.8 $\pm$ 2.1 [-18, 45]		0.7 $\pm$ 1.4 [-23, 28]	
3	0.6 $\pm$ 1.2 [-24, 13]				12.5 $\pm$ 1.6 [-12, 36]			2.0 $\pm$ 0.9 [-13, 28]
4	-2.5 $\pm$ 1.6 [-27, 11]		9.6 $\pm$ 1.3 [-9, 36]			3.8 $\pm$ 1.3 [-22, 28]	-1.1 $\pm$ 0.9 [-16, 21]	
Mean$\pm$ SEM	-0.6 $\pm$ 1.4	9.8 $\pm$ 0.2		12.5 $\pm$ 1.0		1.4 $\pm$ 1.0		

exp	control	30'' NMDA	1' NMDA	2' NMDA
5	-4.1 $\pm$ 1.4 [-30, 13]	3.7 $\pm$ 1.3 [-14, 25]	5.2 $\pm$ 1.3 [-11, 24]	9.6 $\pm$ 1.6 [-2, 66]
6	-0.4 $\pm$ 1.1 [-20, 10]	2.5 $\pm$ 1.2 [-23, 19]	4.7 $\pm$ 1.0 [-5, 21]	8.0 $\pm$ 1.2 [-6, 24]
Mean$\pm$ SEM	-2.3 $\pm$ 1.9	3.1 $\pm$ 0.6	5.0 $\pm$ 0.3	8.8 $\pm$ 0.8

Experiment numbers and sample sizes (n) are the same as in Additional File 1.

[range] = minimum and maximum values.

ANOVA with Tukey's post comparison:

Exp 1: control vs. 30'' K⁺ (P<0.0001); control vs. 2' K⁺ (P<0.0001).

Exp 2: control vs. 3' K⁺ (P<0.0001); 3' K vs. 3' K + 5' recovery (P<0.0001).

Exp 3: control vs. 3' K⁺ (P<0.0001); 3' K vs. 3' K + 10' recovery (P<0.0001).

Exp 4: control vs. 1' K⁺ (P<0.0001); control vs. 1' K + 1' recovery (P<0.005); 1' K vs. 1' K + 1' recovery (P<0.01); 1' K vs. 1' K + 5' recovery (P<0.0001); 1' K + 1' recovery vs. 1' K + 5' recovery (P<0.05).

Exp 5: control vs. 30'' NMDA (P<0.005); control vs. 1' NMDA (P<0.0001); control vs. 2' NMDA (P<0.0001); 30'' NMDA vs. 2' NMDA (P<0.05).

Exp 6: control vs. 1' NMDA (P<0.05); control vs. 2' NMDA (P<0.0001); 30'' NMDA vs. 2' NMDA (P<0.005).