

Supplementary Table 1
Antibodies Used for Western Blotting

<u>Antibody</u>	<u>Sample Type</u>	<u>Conc.</u>	<u>Supplier</u>	<u>Loading Control</u>	<u>Pairing</u>	<u>Secondary</u>
AKT	Homogenate	1:500	Cell Signaling Technology	Actin	Together	Rabbit
pAKT (s473)	Homogenate	1:500	Cell Signaling Technology	Actin	Together	Rabbit/mouse
S6 (s235/236)	Homogenate	1:500	Cell Signaling Technology	Actin	Together	Rabbit
pS6 (s235/236)	Homogenate	1:500	Cell Signaling Technology	Actin	Separate	Rabbit
pS6 (s240/244)	Homogenate	1:500	Cell Signaling Technology	Actin	Separate	Rabbit
p70S6K	Homogenate	1:500	Cell Signaling Technology	Actin	Separate	Rabbit/mouse
FMRP	Synaptosome	1:500	Cell Signaling Technology	Actin	Separate	Rabbit/mouse
pFMRP (s499)	Synaptosome	1:500	PhosphoSolutions	Actin	Separate	Rabbit
GFAP	Synaptosome	1:500	Cell Signaling Technology	Actin	Together	Rabbit/mouse
GluA1	Synaptosome	1:500	NeuroMab	Actin	Together	Rabbit/mouse
mGluR 1/5	Synaptosome	1:500	NeuroMab	Actin	Together	Rabbit/mouse
NR2A	Synaptosome	1:500	Merck Millipore	Actin	Together	Rabbit
NR2B	Synaptosome	1:500	Merck Millipore	Actin	Together	Rabbit
Pan-Shank	Synaptosome	1:500	NeuroMab	Actin	Together	Rabbit/mouse
PSD-95	Synaptosome	1:500	NeuroMab	Actin	Together	Rabbit/mouse
Actin		1:1000	Cell Signaling Technology			

Note: Secondary antibodies were 1:20,000 anti-rabbit, anti-mouse, or both.

Supplementary Table 2

Western Blotting Summary - Hippocampus

Protein	1 hour				24 hour				1 week			
	Control	Seizure	Change	Sig.	Control	Seizure	Change	Sig.	Control	Seizure	Change	Sig.
AKT	100 ± 1.6,	112 ± 5.32,	-	-	100 ± 9.02,	108.85 ± 12.56,	-	-	100 ± 1.6,	112 ± 5.32,	-	-
pAKT (s473)	100 ± 7.18,	108 ± 9.98,	-	-	100 ± 10.19,	98.5 ± 16.96,	-	-	100 ± 7.18,	108 ± 9.98,	-	-
% Total pAkt (s473)	99.95 ± 7.03,	93.33 ± 9.78,	-	-	101.34 ± 7.54,	88.94 ± 8.14,	-	-	99.95 ± 7.03,	93.33 ± 9.78,	-	-
S6	100 ± 1.95,	102.15 ± 1.88,	-	-	100 ± 6.35,	99.74 ± 7.86,	-	-	100 ± 1.95,	102.15 ± 1.88,	-	-
pS6 (s235/236)	100 ± 7.16,	162.5 ± 6.66,	↑	***	100 ± 4.13,	105.87 ± 9.04,	-	-	100 ± 7.16,	162.5 ± 6.66,	-	-
% Total pS6 (s235/236)	101.29 ± 8.51,	154.15 ± 7.41,	↑	***	100.33 ± 4.98,	107.87 ± 10.18,	-	-	101.29 ± 8.51,	154.15 ± 7.41,	-	-
pS6 (s240/244)	100 ± 1.66,	110.8 ± 1.6,	↑	***	100 ± 6.52,	101.18 ± 7.18,	-	-	100 ± 1.66,	110.8 ± 1.6,	-	-
% Total pS6 (s240/244)	100.1 ± 1.14,	108.603 ± 1.52,	↑	***	99.98 ± 1.28,	101.85 ± 1.7,	-	-	100.1 ± 1.14,	108.603 ± 1.52,	-	-
p70S6K	100 ± 14.95,	112 ± 13.44,	-	-	100 ± 6.84,	99.97 ± 11.21,	-	-	100 ± 14.95,	112 ± 13.44,	-	-
FMRP	100 ± 10.72,	145.13 ± 16.86,	↑	*	100 ± 7.73,	97.3 ± 10.86,	-	-	100 ± 10.72,	145.13 ± 16.86,	-	-
pFMRP (s499)	100 ± 10.83,	126.78 ± 8.86,	↑	# .074	100 ± 6.08,	111.11 ± 10.05,	-	-	100 ± 10.83,	126.78 ± 8.86,	-	-
% Total FMRP (s499)	102.4 ± 6.28,	106.92 ± 27.9,	↑	# .077	102.23 ± 6.29,	120.52 ± 12.94,	-	-	102.4 ± 6.28,	106.92 ± 27.9,	-	-
GFAP	100 ± 1.88,	100.69 ± 1.26,	-	-	100 ± 1.12,	106.7 ± 5.55,	-	-	100 ± 1.88,	100.69 ± 1.26,	-	-
GluA1	-	-	-	-	100 ± 4.48,	119.76 ± 6.66,	↑	*	-	-	-	-
mGluR 1/5	100 ± 10.82,	92.95 ± 17.01,	-	-	100 ± 8.03,	127.13 ± 35.34,	-	-	100 ± 10.82,	92.95 ± 17.01,	-	-
NR2A	100 ± 3.31,	95.2 ± 2.94,	-	-	100 ± 3.49,	97.18 ± 2.58,	-	-	100 ± 3.31,	95.2 ± 2.94,	-	-
NR2B	100 ± 11.54,	84.08 ± 3.65,	-	-	100 ± 2.13,	98.13 ± 3.83,	-	-	100 ± 11.54,	84.08 ± 3.65,	-	-
Pan-Shank	100 ± 4.002,	106.09 ± 2.39,	-	-	100 ± 6.004,	119.15 ± 10.52,	-	-	100 ± 4.002,	106.09 ± 2.39,	-	-
PSD-95	100 ± 6.37,	95.56 ± 8.96,	-	-	100 ± 2.77,	135.03 ± 13.94,	↑	# .065	100 ± 6.37,	95.56 ± 8.96,	-	-

Note: Values are the mean ± SEM. ↑ = increase, # = trending, * p < 0.05, *** p < 0.001.

Supplementary Table 3

Western Blotting Summary - Cortex

Protein	1 hour				24 hour				1 week			
	Control	Seizure	Change	Sig.	Control	Seizure	Change	Sig.	Control	Seizure	Change	Sig.
AKT	100 ± 4.32,	97.11 ± 3.59,	-	-	100 ± 2.84,	98.25 ± 1.56,	-	-	100 ± 4.63,	92.62 ± 3.57,	-	-
pAkt (s473)	100 ± 10.25,	107.57 ± 7.96,	-	-	100 ± 9.09,	111.36 ± 29.69,	-	-	100 ± 15.18,	81.76 ± 13.77,	-	-
% Total pAkt (s473)	103.35 ± 13.88,	110.93 ± 7.42,	-	-	100.76 ± 9.85,	112.94 ± 29.83,	-	-	99.75 ± 14.24,	88.98 ± 15.31,	-	-
S6	100 ± 22.54,	84.6 ± 13.45,	-	-	100 ± 11.04,	89.44 ± 10.31,	-	-	100 ± 8.85,	107.55 ± 24.4,	-	-
pS6 (s235/236)	100 ± 20.57,	77.06 ± 14.27,	-	-	100 ± 7.69,	111.29 ± 17.28,	-	-	100 ± 10.36,	88.61 ± 6.91,	-	-
% Total pS6 (s235/236)	385.39 ± 276.65,	131.11 ± 39.33,	-	-	107.58 ± 12.3,	96.54 ± 15.45,	-	-	103.13 ± 13.55,	102.47 ± 9.76,	-	-
pS6 (s240/244)	100 ± 24.07,	97.37 ± 20.31,	-	-	100 ± 8.85,	85.68 ± 9.03,	-	-	100 ± 5.92,	97.49 ± 13.32,	-	-
% Total pS6 (s240/244)	330.21 ± 226.69,	144.93 ± 33.32,	-	-	102.91 ± 5.6,	100.91 ± 12.52,	-	-	102.68 ± 5.63,	125.07 ± 25.47,	-	-
p70S6K	100 ± 4.12,	85.48 ± 8.64,	-	-	100 ± 18.04,	74.67 ± 19.88,	-	-	100 ± 7.54,	166.35 ± 22.76,	↑	*
FMRP	100 ± 13.86,	118.58 ± 18.38,	-	-	100 ± 3.81,	156.97 ± 28.51,	↑	# .068	100 ± 13.07,	108.02 ± 14.68,	-	-
pFMRP (s499)	100 ± 4.9,	108.07 ± 10.79,	-	-	100 ± 10.11,	119.03 ± 16.08,	-	-	100 ± 8.92,	110.97 ± 9.24,	-	-
% Total FMRP (s499)	108.77 ± 8.74,	102.13 ± 12.81,	-	-	98.51 ± 7.04,	88.56 ± 12.76,	-	-	130.66 ± 39.31,	108.65 ± 6.98,	-	-
GFAP	100 ± 2.97,	93.44 ± 6.27,	↓	# .063	100 ± 4.96,	104.45 ± 9.31,	-	-	100 ± 7.25,	93.63 ± 4.5,	-	-
GluA1	-	-	-	-	100 ± 2.21,	96.89 ± 8.38,	-	-	100 ± 7.34,	116.73 ± 20.98,	-	-
mGluR 1/5	100 ± 10.75,	100.84 ± 13.16,	-	-	100 ± 3.71,	119.87 ± 14.24,	-	-	100 ± 4.96,	99.22 ± 8.69,	-	-
NR2A	100 ± 10.15,	96.09 ± 19.66,	-	-	100 ± 13.36,	109.21 ± 18.04,	-	-	100 ± 10.96,	89.31 ± 9.24,	-	-
NR2B	100 ± 14.77,	140.02 ± 35.55,	-	-	100 ± 18.78,	128.37 ± 20.16,	-	-	100 ± 4.21,	77.38 ± 7.31,	-	-
Pan-Shank	100 ± 5.08,	101.36 ± 7.16,	-	-	100 ± 8.69,	108.9 ± 15.44,	-	-	100 ± 8.12,	88.34 ± 5.92,	-	-
PSD-95	100 ± 7.17,	83.07 ± 3.84,	↓	# .054	100 ± 9.37,	119.02 ± 11.03,	-	-	100 ± 6.08,	95.37 ± 7.92,	-	-

Note: Values are the mean ± SEM. ↑ = increase, ↓ = decrease, # = trending, * p < 0.05.