Supplemental Information

Supplemental Results

Table S1. Repeated testing of sucrose preference does not produce habituation to the test.

	d3	d5	d7
CTR	65.78 ± 5.53	68.14 ± 3.34	66.78 ± 4.78
CUS	44.57 ± 4.24**	48.99 ± 2.78**	45.41 ± 3.59**

Rats were exposed to CUS for 21 days and then behavior was determined in the sucrose preference test at different time points, including d3, d5, and d7 after vehicle injections (see Figure 1 for details). Values represent mean ± SEM (n = 6 per group; ***P* < 0.01, ANOVA).

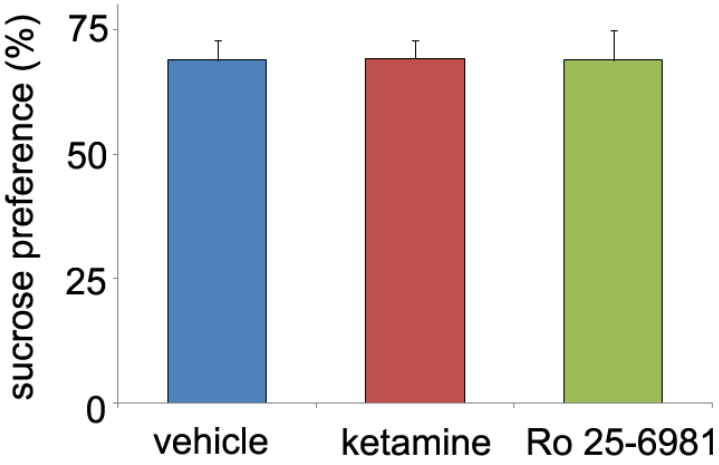

Figure S1. Acute ketamine or Ro 25-6981 injection did not affect sucrose preference test performance. Rats were administered ketamine or Ro 25-6981 (10 mg/kg, i.p.) and were then examined in the sucrose preference test 24 h later. Values represent mean ± SEM (n = 6 per group).

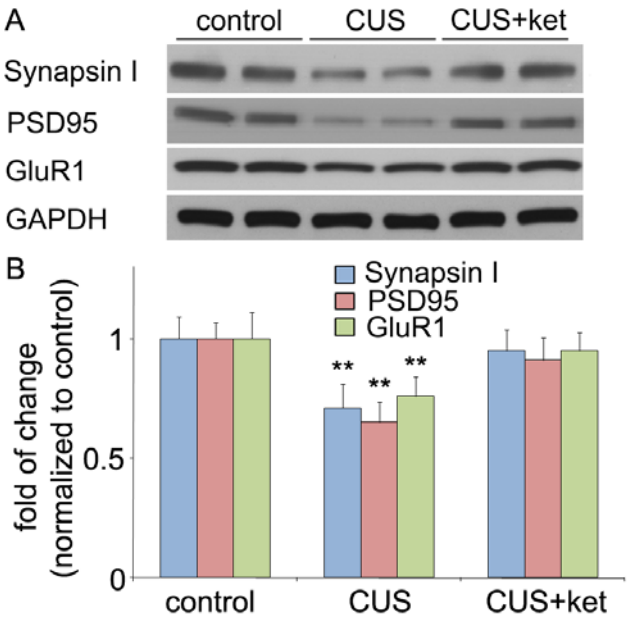

Figure S2. Ketamine reversal of CUS-induced synaptic protein deficits lasts up to 7 days after drug treatment. Rats were exposed to CUS for 21 d and then behavioral analysis conducted (see Figure 1 for complete description of CUS and testing paradigm). After the last behavioral testing period (day 7 after ketamine) levels of synaptic proteins, including synapsin I, PSD95, and GluR1 were determined. Values represent mean ± SEM (n = 6 per group; $^{**}P < 0.01$, ANOVA).

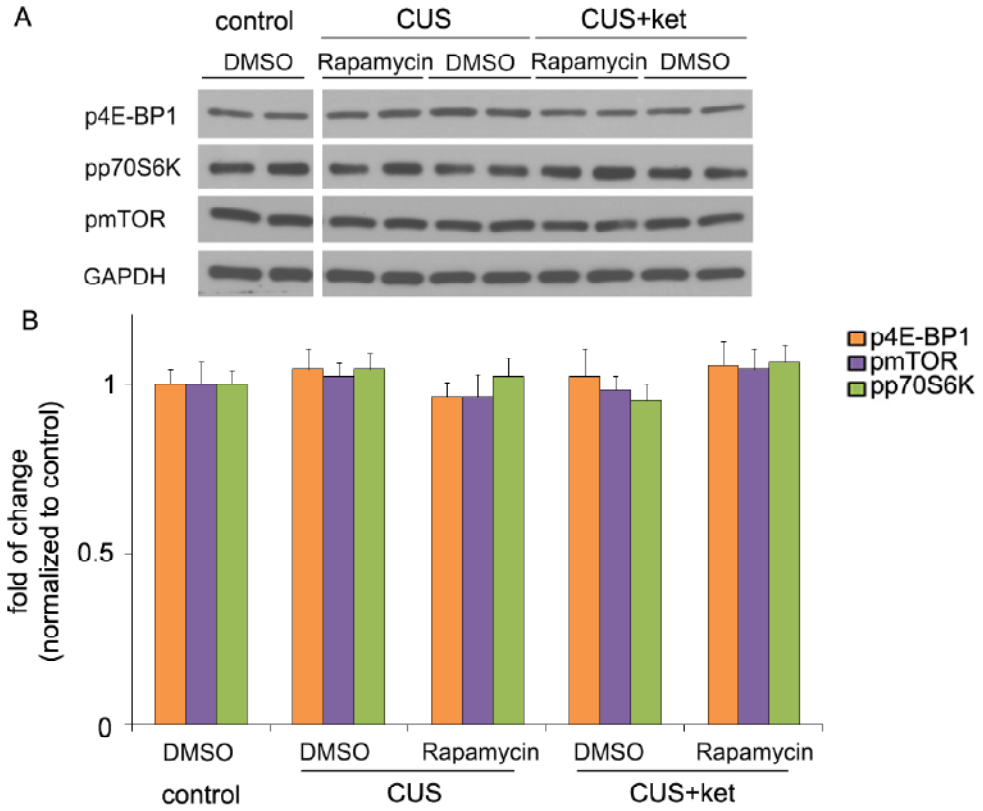

Figure S3. Effects of CUS and ketamine on mTOR signaling. Rats were exposed to CUS for 21 d and then the influence of drug treatments on behavioral analysis was conducted in the sucrose preference and novelty suppressed feeding tests (see Figure 1). Stressors during behavioral testing included food and water deprivation. Tissue was collected 4 h after behavioral testing and levels of mTOR signaling proteins, including phosphorylated forms of mTOR (pmTOR), 4E-BP1 (p4E-BP1), and p70S6K (pp70S6K) were determined by western blot analysis. Values represent mean ± SEM (n = 6 per group).