Supplementary Figure S1.

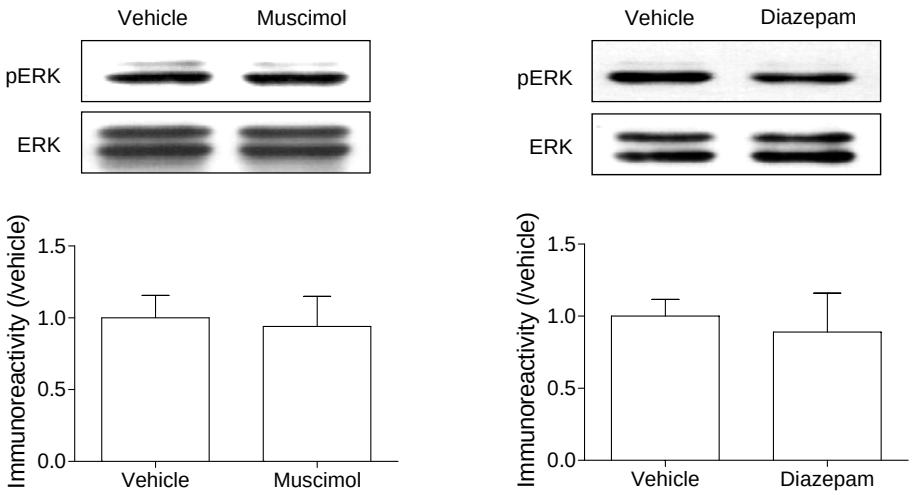

Figure S1. The dosage of muscimol (0.25 μg/μl/side) or diazepam (10 μg/μl/side) that impaired memory retrieval did not reduce ERK phosphorylation in normal state. Drugs were injected into hippocampus and mice were sacrificed 15 min later. Hippocampal sample was subjected to western blot assay for observing the levels of ERK phosphorylation. Data are represented as mean ± S.E.M. (n = 5).

Supplementary Figure S2.

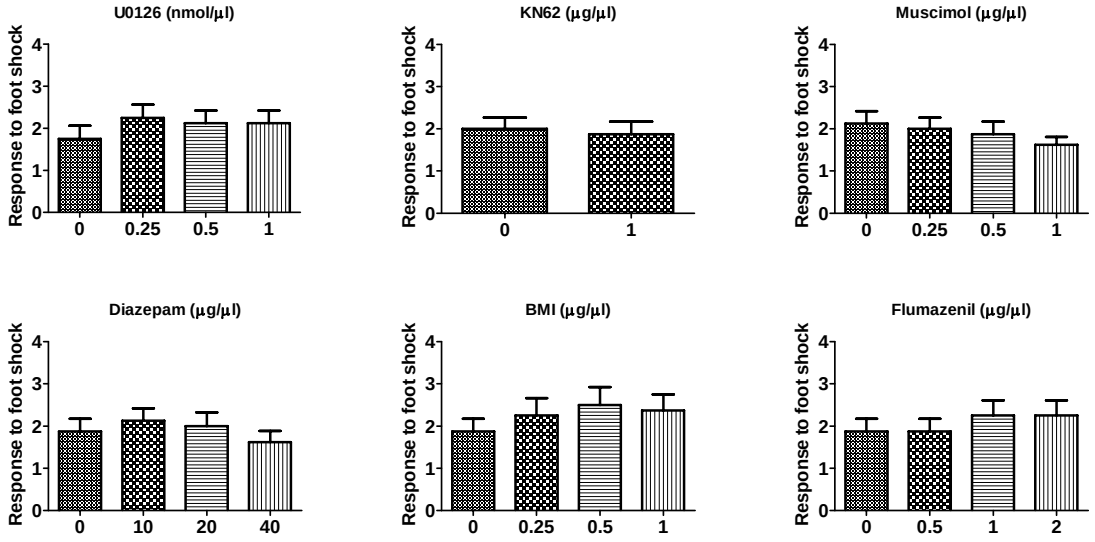

Figure S2. Effects of several compounds used in the present study on electric shock behavior. Drugs were administered 15 min before test. Shock (0.25 mA, 3 s) was delivered through grid. The following scores were awarded based on responses to electric shock; 3, jumping; 2, vocalization; 1, flinching; 0, no response. Data are expressed as means ± S.E.M. (*n*=8-10). BMI; bicuculline methiodide.

Supplementary Figure S3.

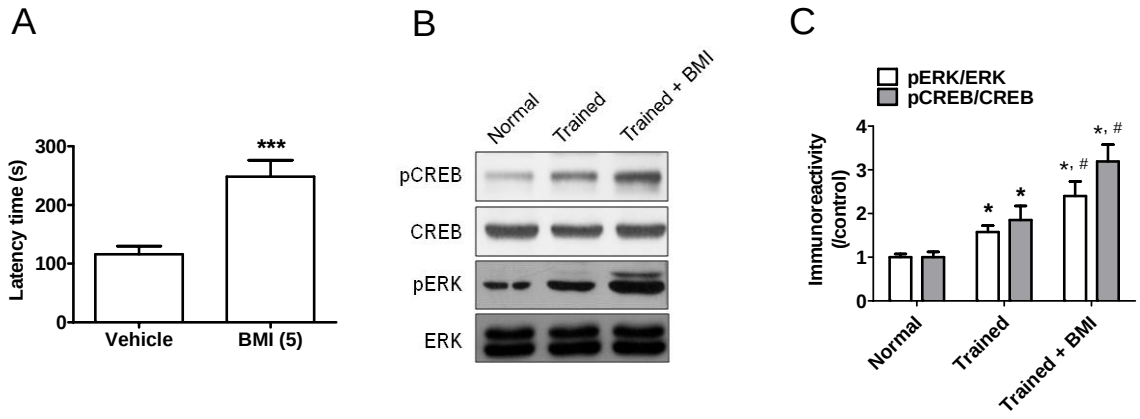

Figure S3. Bicuculline enhances memory consolidation and ERK signaling. A) Mice were injected bicuculline methiodide (BMI, 5 mg/kg, i.p.) immediately after an acquisition trial. Retrieval trial was conducted and measured latency time at 24 h after the acquisition trial. B-C) Mice were sacrificed 3 h after the acquisition trial. Normal group did not suffer the passive avoidance task. Data represented mean ± S.E.M. **P* < 0.05 vs Vehicle or Normal group. #*P* < 0.05 vs Trained group.