

## MK801 Induced Mouse Model

The non-competitive NMDA receptor antagonist Dizocilpine (MK-801) produces complex symptoms that mimic positive and negative symptoms, as well as cognitive deficits of schizophrenia. C57Bl/6 mice are injected with MK-801 causing:

- Increased activity
- Reduced emotional learning

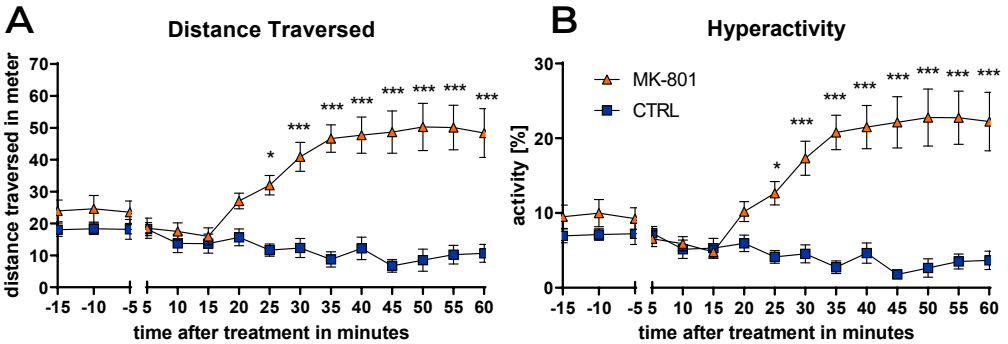


Figure 1: Open field test. A: Distance traversed of MK-801-treated animals compared to sham treated control. B: Hyperactivity level of MK-801-treated animals compared to sham treated control. Mean ± SEM; Two-way ANOVA with Bonferroni's *post hoc* test. \* $p < 0.05$ ; \*\*\* $p < 0.001$ .

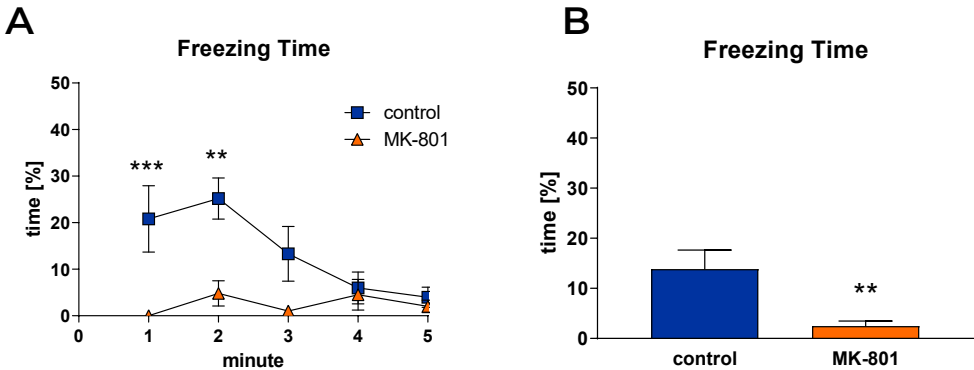


Figure 2: Contextual fear conditioning test. Percentage of freezing of MK-801- and sham-treated animals during the contextual phase of the CFC. A: Freezing behavior over a 5 minutes testing period; B: total freezing time. Mean ± SEM, Two-way ANOVA with Bonferroni's *post hoc* test (A), t-test (B); \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ .

Csernansky JG, Martin M, Shah R, Bertchume A, Colvin J, Dong H. Neuropsychopharmacology, 2005 Dec;30(12):2135-43. Cholinesterase inhibitors ameliorate behavioral deficits induced by MK-801 in mice.