Supporting Information

Gideons et al. 10.1073/pnas.1323920111

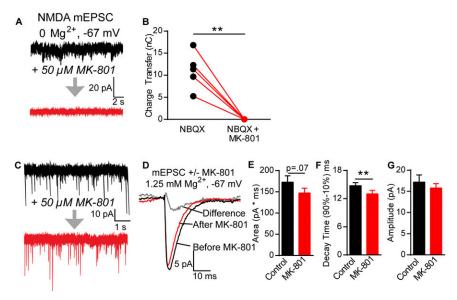


Fig. S1. MK-801 blocks the NMDA receptor with and without magnesium (Mg^{2+}) present during recording. (A) Example traces recorded before and after perfusion with Dizocilpine (MK-801). (B) Application of MK-801 caused a significant decrease in charge transfer (Student's paired t test: P = 0.004, n = 6 coverslips). (C) Example traces of miniature excitatory postsynaptic currents (mEPSCs) recorded in 1.25 mM Mg^{2+} before and after incubation with MK-801. (D) Average traces of 100 mEPSCs recorded before (black trace) and after (red trace) perfusion with MK-801 with the calculated difference trace (gray trace). (E-G) Perfusion of MK-801 causes an almost significant decrease in mEPSC area (Student's paired t test: P = 0.07), a significant decrease in mEPSC decay time (Student's paired t test: P = 0.027) (n = 14 coverslips).