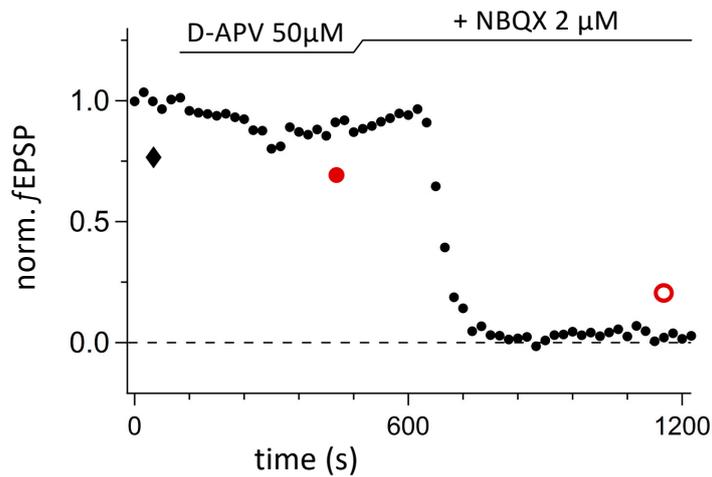
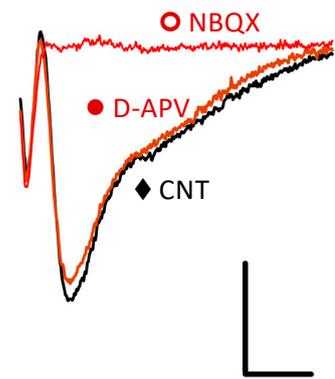


# Supplementary Figure S1

**a**



**b**



## Field potentials in PrL L1 evoked by L1 stimulation are mostly dependent on glutamate receptor activation

The excitatory nature of the negative-going PSP peak was tested by applying the AMPA receptor antagonist NBQX (2 µM) and the NMDA receptor antagonist D-APV (50 µM) in 7 experiments. PSP peak was measured in the 2.5-3.5 ms time interval after L1 stimulation (see Methods). PSP peak after application of both antagonists was  $11.3 \pm 1.7\%$  of control. Further addition of TTX to block presynaptic spikes was applied in 3 experiments, yielding a PSP decrease to  $0.02 \pm 0.8\%$  of control.

**(a)** Time-course of the postsynaptic potential (PSP) negative peak in a representative experiment. L1 field recordings were firstly obtained in control aCSF. The NMDA receptor antagonist D-APV (50 µM) and the AMPA receptor antagonist NBQX (2 µM) were added at times indicated by the horizontal bars.

**(b)** Representative traces (average of 5 consecutive responses) from the experiment in (a), obtained at the times indicated by color-coded symbols in the time-course in (a), in control aCSF (CNT, black trace), in the presence of D-APV (brown trace) and after addition of NBQX (red trace).