



**Supplementary Figure S2** AAV2-Cre-GFP-mediated deletion of mTOR had no significant effects on DSI in hippocampal CA1 pyramidal neurons. The decay time constant ( $\tau$ ) (control,  $16.2 \pm 2.2$  s,  $n = 10$ ; mTORff,  $13.7 \pm 1.6$  s,  $n = 10$ ;  $t_{18} = 0.91$ ,  $p > 0.05$ ) and magnitude (control,  $32.7 \pm 3.6\%$ ,  $n = 10$ ; mTORff,  $29.8 \pm 3.1\%$ ,  $n = 10$ ;  $t_{18} = 0.62$ ,  $p > 0.05$ ) of DSI in AAV2-Cre-GFP-expressing neurons were not significantly different between control and mTORff groups. DSI was induced by 5 s depolarization from -60 mV to 0 mV. Sample traces of IPSCs are superimposed on the top. The solid lines are single exponential fitting curves of the decay of DSI.