



FIG. S1. I-V curves from experiments using different internal solutions. Top: Synaptic currents evoked by extracellular stimulation recorded at different holding potentials with 3 mM QX-314 in recording pipette. Holding potentials near -80 mV are indicated in the figure. Each trace was averaged from 30 trials. Currents were measured in the presence of glutamate receptor blockers (50  $\mu$ M APV, 15  $\mu$ M CNQX). Bottom: Instantaneous synaptic currents at 3 ms after extracellular stimulation (dotted grey lines in top) are plotted against holding potentials. Each point represents data recorded in each trial. Fits were performed using linear regression.