



Supplementary Figure 1, Frequency-dependent increase in the synaptic depression rate by folimycin pretreatment is not related to increased release probability at excitatory and inhibitory synapses.

A, Plot showing the change in paired pulse ratio at either folimycin or vehicle pretreated CA1 pyramidal neurons. Paired pulse ratio (P2/P1) was calculated from the pairs of responses which were evoked with interstimulus interval of 33, 50, 100 and 1000 ms from pharmacologically isolated excitatory synapses at CA1 region of hippocampal slices which were pretreated with either DMSO or folimycin, where P1 represents the first and P2 represents the second response. P2/P1 did not change significantly at folimycin pretreated EPSCs compared to controls. *B*, At inhibitory synapses, paired pulse ratio did not change by folimycin pretreatment. Insets showing the paired pulse responses for each interstimulus interval recorded from control and folimycin groups at excitatory (*A*) and inhibitory (*B*) synapses. Here, it is important to note that in these experiments we detected mild depression in contrast to the widely established facilitating nature of the Schaffer collateral synapses. We primarily worked on naïve synapses, which have not been subjected to stimulation due to the strictly use dependent nature of the experiments. However, when we stimulated the Schaffer collaterals for a period prior to the measurements, the paired pulse ratio significantly increased indicating a shift towards strong facilitation (at 10 Hz: paired pulse ratio 0.98 ± 0.04 vs. after entrainment 1.25 ± 0.04 ; at 20 Hz: paired pulse ratio 0.89 ± 0.04 vs. after entrainment 1.51 ± 0.08).