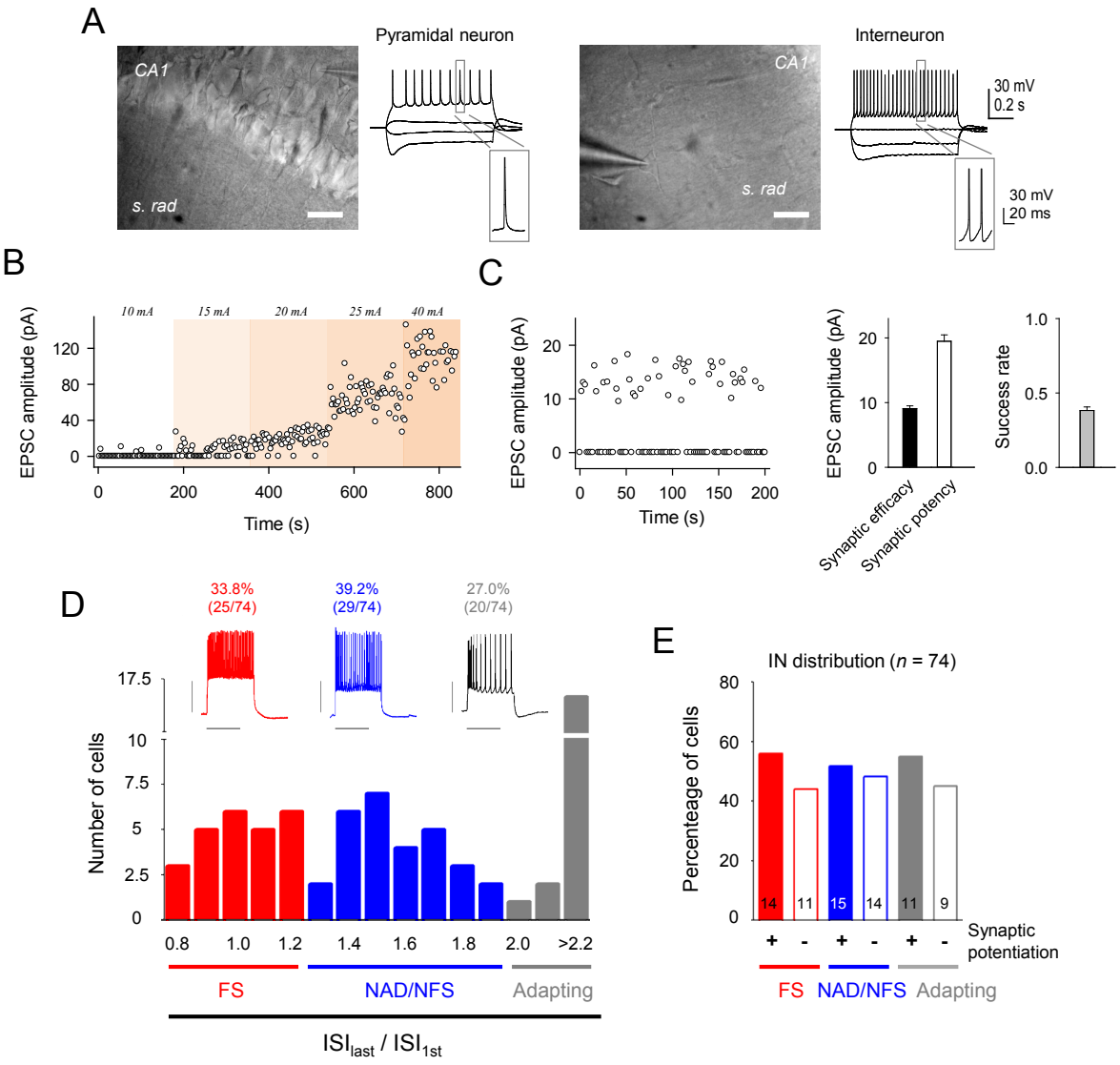

Figure 1-figure supplement 1. Electrophysiological properties of recorded cells and synaptic currents evoked by minimal stimulation. (A) Infrared differential interference contrast images of a CA1 pyramidal neuron (left) and an interneuron (right), with their representative voltage responses to hyper and depolarizing current pulses. Scale bar, 40 µm. **(B)** Time course of EPSC peak amplitude of single synapse stimulation while increasing stimulation intensity. Note the step-like activation of larger responses with small changes in stimulus intensity. **(C)** *Left*, EPSC amplitudes (failures and successes) from a representative CA3-CA1 single synapse recorded from a CA1 pyramidal neuron. Note the high number of transmission failures and the relative low and constant EPSC amplitude, which are indicative of putative single synapse activity. Note that stimulation intensity was unchanged for the entire experiment. *Right, Right,* summary of synaptic transmission parameters from representative recordings evoked by minimal stimulation: synaptic efficacy (mean amplitude of all EPSCs, including failures), synaptic potency (mean EPSC amplitude without failures), and mean success rate of neurotransmitter release (n = 45 synapses). **(D)** *Top*, representative firing patterns of the 3 types of recorded interneuron evoked by 700 ms depolarization pulses. *Bottom*, representation of the number of cells belonging to each interneuron subtype, according to their inter-spike interval (ISI) adaptation rate. **(E)** Proportion of interneuron that induced synaptic transmission potentiation after eliciting bursts of interneuron APs. These data indicate that the synaptic potentiation was independent of the interneuron subtypes. Error bars indicate SEM.