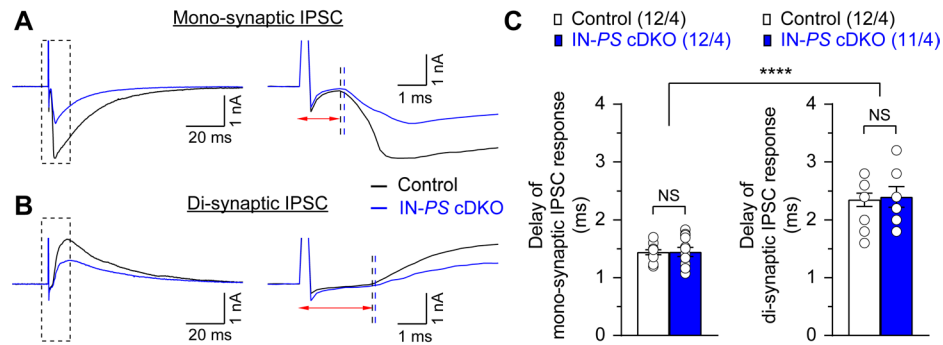


Additional file 1



Additional Fig. 1 The synaptic latency of the IPSC triggered by the SC stimulation is significantly longer compared to the latency of the IPSC induced by direct stimulation resulting in mono-synaptic responses.

A) Left: Superimposed examples of mono-synaptic IPSCs in control and IN-PS cDKO neurons. Scale bar: 20 msec, 1 nA. **Right:** IPSCs are shown on an expanded time scale. The arrowhead indicates delays from the onset of stimulation to the onset of the IPSC. Scale bar: 1 msec, 1 nA. **B) Left:** Superimposed examples of di-synaptic IPSCs in control and IN-PS cDKO neurons. Scale bar: 20 msec, 1 nA. **Right:** IPSCs are shown on an expanded time scale. The arrowhead indicates delays from the onset of stimulation to the onset of the IPSC. Scale bar: 1 msec, 1 nA. **C)** Bar graphs showing the mean values of delays of mono- and di-synaptic IPSCs. There is no significant difference between control and IN-PS cDKO neurons in delays of mono-synaptic ($p = 0.96$) and di-synaptic IPSC responses ($p = 0.81$, unpaired t -test). However, the delays of di-synaptic IPSC responses are markedly longer than the delays of mono-synaptic IPSC responses (Control: $p < 0.0001$; IN-PS cDKO: $p < 0.0001$; unpaired t -test). All data represent mean $\pm$ SEM (**** $p < 0.0001$; NS: not significant). The number of neurons/mice in each experimental group is shown in parentheses.