**Supplementary figure 1** Non-FS interneurons are distinct from FS interneurons and are inhibitory. (a) Graph of AHP width and AHP amplitude for individual FS (filled circles), non-FS interneurons (open squares) and non-FS GFP+ interneurons (in slices from GIN mice, ‘non-FS GIN’) in layer IV (all P7-9). Only two parameters are shown in this plot, however, multivariate hierarchical cluster analysis using AHP width, AHP amplitude, AP threshold and AP number separate the FS interneurons and non-FS interneurons into different classes. (b) Traces from a simultaneous recording of a synaptically connected non-FS interneuron and SC pair (not GIN). An AP in the non-FS interneuron produces an IPSP in the SC.