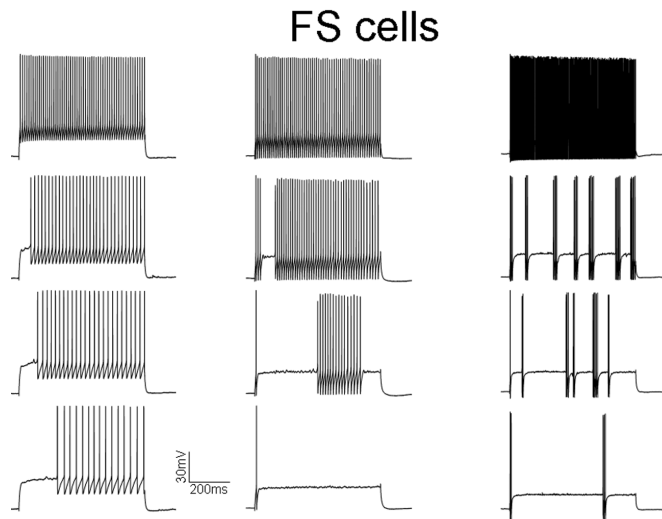


Supplementary information | S9



Near-threshold differences in discharge patterns of neocortical FS interneurons. *In vitro* whole-cell current clamp recordings are shown from three GFP-identified FS cells in somatosensory cortex of mice expressing GFP in PV+ neurons. The examples exhibit different firing patterns in response to current injections near rheobase (lower traces), however with sufficient current injection all convert to a continuous fast-spiking pattern (top traces). Right column: FS cell with delayed response to near-threshold current injection. Note the duration of the delay decreases with increasing depolarizing current injection. Middle column: FS cell which responds with a single onset spike at rheobase. Additional abrupt firing is seen with increasing current injection following an interruption resembling that observed in delayed FS cells. Right column: FS cell displaying a stuttering firing pattern that converts to continuous firing with increased current injection. In all cases spikes were brief with a large, fast AHP. Images courtesy of Brian Clark, Smilow Neuroscience Program, NYU School of Medicine.