



Figure S5: **Spiking properties of the deterministic model** Spiking responses in response to threshold current injection into the wild-type (upper trace) and HCN1 knock-out (lower trace) deterministic models. Spikes were aligned and averaged (right plot) for the wild-type (black) and HCN1 knock-out (red) simulations. Note the difference in AHP recovery (highlighted with exponential fit) between the models.