

Frequency (Hz)	Current Thresholds (pA)		
	Single AP	Multiple APs	Prolonged AP
5	20	27	-
10	30	42	-
25	65	80	105
50	140	160	210
100	270	310	410
250	700	800	1100
500	1350	1550	2200
1000	2700	3100	4200
2000	5400	6200	9000
3000	8000	9300	16000
5000	14000	16000	27000
10000	27000	31000	60000

Table S2: Current thresholds for different type of responses obtained in single-cell simulations using sinusoidal wave stimulation. For frequencies lower than 25 Hz, no prolonged AP was observed, but the multiple-AP response persisted. All thresholds increase monolithically with increasing frequency. Thresholds for sinusoidal stimulation were higher compared to square-wave stimulation similar to experimental findings. Simulations did not reveal the binary response observed in experiments. Thresholds are reported for a stimulus duration of 5 s.