

Supplementary Table 1.

	Stimulation condition		Time constant (τ)	# of cell analyzed	<i>p</i> value
Cultured hippocampal neuron	5 Hz, 300 APs	Control	23.0 ± 1.8 s	5	$p < 0.01$
		Dyrk1A	56.7 ± 5.7 s	3	
	10 Hz, 300 APs	Control	27.0 ± 2.3 s	5	$p < 0.01$
		Dyrk1A	47.4 ± 7.4 s	4	
	20 Hz, 300 APs	Control	27.3 ± 1.3 s	5	$p < 0.01$
		Dyrk1A	41.9 ± 3.2 s	4	
TG mouse	5 Hz, 300 APs	Non-TG	26.2 ± 3.2 s	4	$p < 0.01$
		TG	44.4 ± 2.9 s	6	