

Electrophysiological properties of V2a interneurons in the lumbar spinal cord

		neonatal		adult	
type of firing	tonic firing (%)	whole-cell *1		perforated patch *2	perforated patch *2
	phasic firing (%)	24		45	3
	delayed firing (%)	8		10	7
		tonic firing cells	phasic firing cells	delayed firing cells	tonic firing cells
passive firing properties	resting membrane potential (mV)	-46.4 ± 4.6	-48.7 ± 5.2	-50.1 ± 6.3	-44.4 ± 56
	input resistance (MΩ)	1034 ± 243	1603 ± 378	713 ± 147	~1100
	membrane capacitance (pF)	23.6 ± 16.2	19.5 ± 10.4	25.6 ± 11.8	17.9 ± 1.3
active firing properties	current rheobase (pA)	14.8 ± 7.9	12.5 ± 10.1	24.1 ± 14.3	~ 17
	voltage threshold (mV)	-32.2 ± 4.4	-29.6 ± 6.8	-27.5 ± 5.4	~-30
	action potential amplitude (mV)	26.7 ± 6.9	21.8 ± 8.7	23.9 ± 9.5	~65
	action potential half-width (ms)	2.4 ± 0.5	3.4 ± 0.7	2.6 ± 0.8	~1

* 1 = Zhong et al., 2010

* 2 = Husch et al., 2015

See Dougherty and Kiehn, 2010 (table 1) for a more detailed characterization of different V2a firing types in neonates