

neuron type	Ø [µm]	L [µm]	AIS properties	Reference
hippocampal dentate granule cells	~1	-	CO, many IS-2-FV, occasional SLP	Kosaka, 1983
pyramidal & stellate cells, monkey motor cortex	0.8-3.3	31-54	CO; IS-2 (2-19); pyramidal cell: occasional SLP; one AIS arising from a dendrite	Sloper and Powell, 1979
pyramidal neurons, mammalian cortex	-	-	CO; IS-2-FV; frequent SLP	Somogyi et al., 1982
pyramidal neurons, rat hippocampus	0.8-2	20-65	CO, IS-2-FV (25-143), SLP (0-26)	Kosaka, 1980a
small pyramidal neurons, rat cerebral cortex	0.6-1.2	-	CO, IS-RV(?; see Fig. 2C)	Peters et al., 1968
pyramidal neurons, rat pyriform cortex	0.5-3	-	CO, IS-2-FV; frequent SLP	Westrum, 1970
pyramidal neurons, cat somatic sensory cortex	-	-	C, IS-2-FV	Jones and Powell, 1969
motor/somatosensory cortex, rhesus monkeys	-	24-54	CO, IS-2, SLP	Sloper and Powell, 1973
various neuron types, rat	-	-	Purkinje cell: NS; pyramidal cell: many IS	Palay et al., 1968
Purkinje cells, frog	~1.3	-	-	Kohno, 1964
Purkinje cells, rat;	1	-	-	Chan-Palay, 1972
giant cells of Deiters, rat vestibular nucleus	~2	27	proximal IS	Sotelo and Palay, 1968
cartwheel neurons, rat dorsal cochlear nucleus	0.6-1.5	35	rare proximal IS	Wouterlood and Mugnaini, 1984
cat olivary neurons	0.9-1.3	33-40	23-36 IS: IS-2-PV (2/3), IS-1-RV (1/3)	De Zeeuw et al., 1990
I- & P-cells, monkey lateral geniculate nucleus	-	-	I-cell AISs: may arise from dendrites, with OS-FV in varicosities	Hamori et al., 1978
mitral cells in mouse olfactory bulb	-	-	timeline of structural AIS development	Hinds and Ruffett, 1973
Mitral cells, goldfish olfactory bulb	-	-	IS-2 (0-3), OS-1 (20-38), RS (14-20)	Kosaka and Hama, 1979a
Mitral cells; cat olfactory bulb	-	-	OS-1, IS-2, RS	Willey, 1973
Mitral cells, rat olfactory bulb	-	-	NS; AIS full of scattered vesicles	Price and Powell, 1970
short-axon, periglomerular & tufted cells, rat olfactory bulb	-	-	C, IS-2-FV; periglomerular cell: AIS lacks MTF & DUC	Pinching and Powell, 1971
ruffed cell in goldfish olfactory bulb	0.8-1.5	10-20 (Part1)	~100µm long IP with 10-20 SLP & 30-105 synapses (OS-1-RV; IS-2-PV); Part 1: SLP, DUC, MTF; Part 2: DUC, SLP, no MTF; Part 3: SLP, no DUC, no MTF	Kosaka and Hama, 1979b; Kosaka, 1980b
cat Clarke nucleus neurons/dorsal spino-cerebellar tract	1.7-4.2	28	no S	Saito, 1972
motoneurons, cat spinal cord	2.9-4.2	23-38	no S	Conradi, 1969
motoneurons, cat spinal cord	1.3-2.8	19-31	compares AIS of newborn vs. adult; newborn: IS-FV/RV (15-19), SLP; adult: NS, no SLP	Conradi and Skoglund, 1969
motoneurons, cat spinal cord	≥3.3	66.7	on AIS analysed: 3 IS-FV	Kojima and Saito, 1970
motoneurons, cat spinal cord	-	40	IS only on proximal part	Poritsky, 1969
cat caudate nucleus	-	-	AIS can arise from dendrites; CO; SLP, many IS-2-FV/PV	Kemp and Powell, 1971a; Kemp and Powell, 1971b
Mauthner cell, goldfish	10	50	IS-RV?	Nakajima, 1974