

Table 1 | Active zone density.

Synapse	Species	Age	Synapse size [terminal volume (μm^3) or pre-post apposition area (μm^2)]	Active zone number per presynaptic terminal or per bouton	Active zone density (active zones/ μm^2)	Detection method	Reference
Neuromuscular junction	Human	Adult	Not provided	Not provided	$2.6/\mu\text{m}^2$	Freeze-fracture electron microscopy	Fukunaga et al. (1982)
Neuromuscular junction	Mouse	Adult	Not provided	Not provided	$2.5/\mu\text{m}^2$	Freeze-fracture electron microscopy	Fukunaga et al. (1983)
Neuromuscular junction	Mouse	P48	$295\mu\text{m}^2$	780	$2.6/\mu\text{m}^2$	Fluorescent immunohistochemistry	Chen et al. (2011a)
Calyx of Held	Cat	Adult	$1450\mu\text{m}^2$ *	2400	$1.7/\mu\text{m}^2$ *	3D reconstruction of transmission electron micrograph	Rowland et al. (2000)
Calyx of Held	Rat	P9	$1022\mu\text{m}^2$	554	$0.54/\mu\text{m}^2$ *	3D reconstruction of transmission electron micrograph	Satzler et al. (2002)
Calyx of Held	Rat	P9	$655\mu\text{m}^3$	405	$0.61/\mu\text{m}^3$	Fluorescent	Dondzillo et al. (2010)
Endbulb of Held	Rat	P21	$935\mu\text{m}^3$	601	$0.64/\mu\text{m}^3$ *	immunohistochemistry	
Endbulb of Held	Rat	P25	Not provided	155	$0.066\text{ PSD}/\mu\text{m}^2$	3D reconstruction of transmission electron micrograph	Nicol and Walmsley (2002)
Large mossy fiber terminals of granule cells in the hippocampal CA3	Rat	P28	$32.84\mu\text{m}^2$	29.75 per bouton	$0.91/\mu\text{m}^2$	3D reconstruction of transmission electron micrograph	Rollenhagen et al. (2007)
Muscle spindle afferents onto lumbar motor neurons in the spinal cord	Cat	Adult	$22.07\mu\text{m}^2$	18.25 per bouton	$0.83/\mu\text{m}^2$ *	3D reconstruction of transmission electron micrograph	Pierce and Mendell (1993)
Muscle spindle afferents onto lumbar motor neurons in the spinal cord	Cat	Not provided	$6.8\mu\text{m}^2$	6.1 per bouton	$0.90/\mu\text{m}^2$ *	3D reconstruction of transmission electron micrograph	
Synapse onto motor neurons in the cervical spinal cord	Turtle	Adult	$1.46\mu\text{m}^2$	3–4 Active zones per terminal size larger than $2\mu\text{m}^2$	$0.70/\mu\text{m}^2$ *	3D reconstruction of transmission electron micrograph	Yeow and Peterson (1991)
GABAergic nigrothalamic terminals in the ventromedial nucleus	Monkey	Adult	$2.91\mu\text{m}^3$	8.5	$2.9/\mu\text{m}^3$ *	3D reconstruction of immunoelectron micrograph	Bodor et al. (2008)
Anterior pretectal nucleus terminals in the posterior thalamic nucleus	Rat	P45-60	$2.4\mu\text{m}^3$	7.6	$3.2/\mu\text{m}^3$ *	3D reconstruction of immunoelectron micrograph	Wanaverbecq et al. (2008)
GABAergic nigrothalamic terminals in the ventromedial nucleus	Rat	Adult	$1.76\mu\text{m}^3$	8.5	$4.8/\mu\text{m}^3$ *	3D reconstruction of immunoelectron micrograph	Bodor et al. (2008)
Stratum radiatum in CA1 hippocampus	Mouse	Adult	$0.086\mu\text{m}^3$	2–3 Active zones per bouton in 10% of the synapses	$13/\mu\text{m}^3$ *	3D reconstruction of transmission electron micrograph	Schikorski and Stevens (1997)

*Calculated from data in the papers.