

TABLE 4. Varicosities, Synapses, and Targets of Mossy Cell Axon Collaterals

	Hilus, central	Hilus, subgranular	Stratum granulosum	Stratum moleculare			
				Inferior blade, septal	Inferior blade, temporal	Inferior blade, cell level	Superior blade, septal
Two-dimensional length of axon (μm)	187.5	128.9	73.5	29.5	51.0	147.7	100.0
Number of varicosities	40	27	13	14	23	51	27
With synapses	14	13	6	14	21	42	20
Without synapses	26	14	7	0	2	9	7
Average intervaricosity distance (μm)	4.7	4.8	5.6	2.1	2.2	2.9	3.7
Varicosities/ μm	0.21	0.21	0.18	0.47	0.45	0.35	0.27
Number of synapses	18	15	6	29	44	79	29
Average intersynaptic distance (μm)	10.4	8.6	12.1	1.0	1.1	1.9	3.4
Synapses/ μm	0.096	0.116	0.083	0.98	0.86	0.53	0.29
Synapses/varicosity	0.45	0.56	0.46	2.07	1.91	1.55	1.07
Frequency of varicosities with							
0 synapses	26	14	7	0	2	9	7
1–2 synapses	14	13	6	11	15	38	19
3–4 synapses	0	0	0	3	6	4	1
Frequency of synapse targets							
Soma, number (% of total)	1 (5.5)	0 (0)	1 (16.7)	0 (0)	0 (0)	0 (0)	0 (0)
Dendritic shaft	12 (66.7)	14 (93.3)	3 (50)	0 (0)	0 (0)	0 (0)	1 (3.4)
Dendritic spine	5 (27.8)	1 (6.7)	2 (33.3)	29 (100)	44 (100)	79 (100)	28 (96.6)