

Supplemental Table 1. Evoked input (EI) and percentage evoked input (%EI) from each cortical layer for all the cell types examined

Excitatory Input												
		L2/3		L4		L5a		L5b		L6		
		EI	%EI	EI	%EI	EI	%EI	EI	%EI	EI	%EI	
Py (n = 10)		4.34 ± 0.50	30.0 ± 2.9	5.48 ± 0.96	34.1 ± 2.4	4.26 ± 0.99	24.4 ± 0.04	1.19 ± 0.48	7.0 ± 2.1	0.60 ± 0.11	4.5 ± 0.8	
FS (12)		5.93 ± 0.43	34.5 ± 3.0	7.53 ± 1.08	39.9 ± 3.0	2.55 ± 0.37	14.4 ± 2.0	1.93 ± 0.36	10.3 ± 1.8	0.15 ± 0.13	0.9 ± 0.9	
MC+ (25)		7.07 ± 0.61	73.2 ± 2.8	1.83 ± 0.33	16.8 ± 1.9	0.77 ± 0.21	5.9 ± 1.3	0.40 ± 0.09	4.4 ± 1.2	-0.01 ± 0.06	-0.3 ± 0.8	
MC- (18)		4.86 ± 0.51	48.3 ± 4.2	3.88 ± 0.48	36.6 ± 3.1	0.87 ± 0.29	7.1 ± 1.8	0.51 ± 0.13	4.5 ± 1.0	0.38 ± 0.10	3.5 ± 0.9	
IS (11)		3.18 ± 0.50	40.2 ± 3.2	1.05 ± 0.33	13.7 ± 3.2	2.58 ± 0.42	35.2 ± 3.8	0.50 ± 0.13	8.4 ± 1.8	0.16 ± 0.07	2.48 ± 1.5	
RS (7)		2.50 ± 0.32	36.5 ± 6.5	1.29 ± 0.28	16.3 ± 2.9	2.76 ± 0.67	32.1 ± 6.2	1.18 ± 0.31	13.4 ± 2.6	0.16 ± 0.07	1.8 ± 0.7	
BS (8)		2.72 ± 0.38	74.7 ± 12.2	0.62 ± 0.18	14.2 ± 4.7	0.53 ± 0.35	2.0 ± 8.0	0.29 ± 0.08	6.5 ± 1.3	0.10 ± 0.05	2.6 ± 1.0	
Bipolar (5)		3.31 ± 1.39	33.8 ± 7.3	3.26 ± 1.14	39.4 ± 6.4	1.05 ± 0.30	14.0 ± 1.6	0.79 ± 0.28	10.0 ± 2.7	0.20 ± 0.12	2.8 ± 1.5	
Chandelier (3)		4.22 ± 1.06	43.8 ± 10.5	1.96 ± 1.01	17.9 ± 5.6	3.36 ± 1.42	27.9 ± 4.4	1.15 ± 0.77	8.3 ± 3.6	0.29 ± 0.24	2.1 ± 1.3	
NG (4)		3.05 ± 0.29	42.7 ± 3.9	1.41 ± 0.33	19.4 ± 3.9	1.85 ± 0.39	25.4 ± 4.7	0.77 ± 0.07	11.0 ± 1.4	0.10 ± 0.09	1.6 ± 1.2	

Inhibitory Input													
		L1		L2/3		L4		L5a		L5b		L6	
		EI	%EI	EI	%EI	EI	%EI	EI	%EI	EI	%EI	EI	%EI
Py (7)		3.44 ± 0.65	36.6 ± 5.8	4.20 ± 0.37	47.0 ± 3.8	0.54 ± 0.34	5.8 ± 3.8	-0.12 ± 0.33	-2.7 ± 4.4	0.44 ± 0.33	4.7 ± 3.7	0.76 ± 0.38	8.6 ± 3.8
FS (11)		0.75 ± 0.40	4.5 ± 5.1	4.25 ± 0.45	59.5 ± 9.7	3.01 ± 0.79	28.8 ± 7.2	-0.04 ± 0.23	-5.3 ± 5.5	0.07 ± 0.19	2.7 ± 3.2	0.53 ± 0.21	9.8 ± 4.0
MC+ (9)		1.46 ± 0.81	5.7 ± 7.0	4.46 ± 1.26	30.0 ± 7.6	2.85 ± 1.56	20.3 ± 5.9	1.66 ± 0.78	12.7 ± 5.3	1.81 ± 0.40	22.9 ± 6.8	0.74 ± 0.25	8.5 ± 2.6
MC- (6)		0.18 ± 0.26	9.6 ± 9.2	3.54 ± 1.18	29.4 ± 8.1	4.29 ± 1.55	33.3 ± 3.4	3.17 ± 1.83	9.4 ± 15.3	1.31 ± 0.51	12.8 ± 4.9	0.47 ± 0.17	5.5 ± 1.6
IS (9)		1.61 ± 0.58	21.2 ± 5.0	3.09 ± 0.36	38.1 ± 4.0	0.23 ± 0.17	2.4 ± 1.9	1.31 ± 0.37	17.0 ± 3.9	1.38 ± 0.41	16.3 ± 4.5	0.55 ± 0.24	5.0 ± 2.2
RS (6)		0.91 ± 0.49	5.9 ± 8.9	3.69 ± 0.89	59.9 ± 13.4	0.89 ± 0.36	10.3 ± 2.8	0.76 ± 0.70	4.2 ± 7.5	0.64 ± 0.44	12.5 ± 6.4	0.41 ± 0.15	7.2 ± 2.2
BS (9)		1.37 ± 0.68	17.2 ± 6.6	2.79 ± 0.27	48.4 ± 4.1	0.39 ± 0.13	6.4 ± 1.8	0.57 ± 0.26	6.5 ± 3.4	0.78 ± 0.27	12.7 ± 3.7	0.44 ± 0.15	8.8 ± 3.4
Bipolar (4)		0.95 ± 0.45	6.2 ± 1.3	4.23 ± 2.95	24.1 ± 10.4	3.11 ± 2.05	21.5 ± 10.8	3.42 ± 1.07	22.1 ± 2.1	2.69 ± 1.44	20.6 ± 11.2	0.50 ± 0.24	5.5 ± 2.9
Chandelier (4)		1.88 ± 0.72	26.5 ± 3.4	4.45 ± 1.26	67.9 ± 11.2	-0.17 ± 0.30	-2.5 ± 5.6	-0.63 ± 0.45	-16.2 ± 9.7	0.78 ± 0.19	13.9 ± 4.1	0.57 ± 0.15	10.4 ± 3.9
NG (4)		1.19 ± 0.78	16.3 ± 10.0	3.53 ± 0.85	67.8 ± 11.1	0.26 ± 0.24	3.4 ± 3.9	-0.15 ± 0.27	-1.9 ± 6.8	0.14 ± 0.14	0.9 ± 3.4	0.62 ± 0.09	13.6 ± 4.7

Evoked input (EI) is expressed in units of pA, calculated by subtracting the mean spontaneous currents from the mean currents measured following photostimulation in the analysis window of 150 ms for all stimulation sites in each layer. Percentage evoked input (%EI) denotes the average input of each layer as a percentage of the summed input from all the layers examined. The blue numbers indicate statistical significance ($p < 0.05$) in paired t-tests between average current amplitudes of control and photo-stimulation conditions at each layer for the sampled cells. The red numbers indicate statistical insignificance. Please note that all the negative values are not statistically significant. Numbers in parentheses indicate numbers of cells sampled for each cell type.

Py: pyramidal cell; FS: fast spiking cell; MC+: SOM+/CR+ Martinotti cell; MC-: SOM+/CR- Martinotti cell; IS: multipolar irregular spiking cell; RS: multipolar regular spiking cell; BS: multipolar burst spiking cell; Bipolar: bipolar cell; Chandelier: chandelier cell; NG: neurogliaform cell.