

Supplementary Table 1. A summary of the results from the multiple regression performed on how cortical responses varied with ICC stimulation location.

LFP area and DSR recorded within layers I-V of A1 in response to co-activation across an ICC isofrequency lamina (see figures 6 and 7 for ICC locations). For each stimulation location, cortical activity was averaged across recording locations. The angle θ across the isofrequency lamina is the inverse tangent of the slope of the regression, where 90° would be aligned to the caudal to rostral axis and 0° would be aligned to the medial to lateral axis. Each regression was performed on the number of ICC site pairs N, with the descriptive statistics of a coefficient of determination R^2 and probability P.

		0 ms IPI	0.5 ms IPI	1 ms IPI	2 ms IPI	4 ms IPI	8 ms IPI
LFP Layer I/II (N=28)	R^2	0.43	0.30	0.34	0.17	0.05	0.03
	P	0.001	0.025	0.005	0.096	0.515	0.704
	θ ($^\circ$)	75.5	90.9	102.8	112.4	99.9	147.4
LFP Layer III/IV (N=28)	R^2	0.57	0.39	0.16	0.01	0.03	0.01
	P	0.000	0.007	0.129	0.940	0.688	0.843
	θ ($^\circ$)	34.3	54.6	86.4	169.3	31.0	166.3
LFP Layer V (N=25)	R^2	0.51	0.41	0.35	0.10	0.07	0.09
	P	0.00	0.01	0.01	0.32	0.43	0.37
	θ ($^\circ$)	62.3	79.6	96.0	98.1	58.9	55.4
DSR Layer I/II (N=25)	R^2	0.29	0.31	0.18	0.12	0.10	0.08
	P	0.023	0.035	0.106	0.232	0.306	0.401
	θ ($^\circ$)	85.5	96.1	95.9	101.4	82.0	105.4
DSR Layer III/IV (N=27)	R^2	0.24	0.22	0.08	0.02	0.10	0.19
	P	0.035	0.078	0.354	0.757	0.296	0.078
	θ ($^\circ$)	49.5	79.0	103.6	152.5	146.1	14.2