
Supplementary information

**A cortical circuit for audio-visual
predictions**

In the format provided by the
authors and unedited

MAIN:

Figure 1

d test: rank-sum, response difference index compared to 0 difference across soma

tp	p	# soma	# mice
1	0.258	1548	10
2	0.183	1548	10
3	1.19E-06	1548	10
4	4.77E-28	1548	10
5	4.93E-15	1341	9

f test: rank-sum, # lick events during AaVa compared to Va across mice

tp	p	# mice
1	0.4263	10
2	0.3075	10
3	0.064	10
4	0.0452	10
5	0.0039	9

h test: rank-sum, response difference index compared to 0 difference across soma

condition	p	# soma	# mice
AbVa to AaVa	1.49E-16	1341	9
AbVa to Va	0.372	1341	9

Figure 2

f test: rank-sum, normalized suppression compared to 0

condition	p	# axons	# mice
pre	0.1784	2927	7
post	1.58E-20	3857	7
tone	2.42E-176	4130	6

h test: paired t-test, # visually responsive axons to AaVa compared to Va

tp	p	# axons	# mice
1	0.133	5552	8
2	0.0287	4694	7
3	0.0196	4437	7
4	0.0106	4336	6

i test: unpaired t-test, # visually responsive axons on day 1 compared to day 4

plot	p
aud-vis	0.0202
vis only	0.5361

tp	# axons	# mice
1	5552	8
4	4658	7

EXTENDED DATA:

Figure 1

f test: rank-sum, response difference index compared to 0 difference across soma

tp	p	soma	mice
1	3.58E-23	1548	10
2	2.42E-31	1548	10
3	7.04E-08	1548	10
4	4.74E-09	1548	10
5	1.57E-15	1341	9

tp	p
3	
i (light)	0.0962
ii (med)	0.0027
iii (drk)	1.67E-08

i test: rank-sum, response difference compared to 0 difference across soma

tp	p	soma	mice
1	0.061	496	7
2	0.0069	496	7
3	0.0457	496	7
4	0.0015	496	7
5	7.81E-04	335	5

Figure 2

a test: paired t-test, comparison of r^2 on day 1 and day 4 across mice

p	tp	soma	mice
0.0391	1	1548	10
	4	1548	10

Figure 3

b & c test: rank-sum, response difference index compared to 0 difference across soma

tp	p	soma	mice
4	5.41E-10	1548	10
5	5.44E-14	1341	9

e	test: rank-sum , comparison of response difference index between AaVa and AaVb			
	tp	p	soma	mice
	4	2.52E-04	1341	9

Figure 5

a	test: correlation coefficients , null: no relationship exists between variables			
	p	r	soma	mice
	0.71	-0.016	563	5

c	test: correlation coefficients , null: no relationship exists between variables			
	p	r	soma	mice
	6.51E-252	0.9334	563	5

f	test: rank-sum , comparison of response difference indices between excited and inhibited soma					
	tp	p	soma	# excited	# inhibited	mice
	5	8.67E-13	1341	927	414	9

h	test: rank-sum , comparison of response difference indices between excited and inhibited soma					
	tp	p	soma	# excited	# inhibited	mice
	5	1.10E-08	1341	927	414	9

Figure 6

b	test: rank-sum , reinforced: pre vs post conditioning (p. vs p.) unreinforced: reinforced vs unreinforced post cond. (r. vs u.)		
	stimulus	p	mice
	aud (p. vs p.)	4.38E-07	5
	vis (p. vs p.)	7.71E-13	5
	opto (p. vs p.)	0.0169	5
	opto (r. vs u.)	0.0035	7