

Animal ID	Sex	Cre dilution	Helper virus (nl)	Days with rabies	TSA+ used?	Starter cells	Starter cell identity	Rabies cells in hipp	Rabies cells in EC	Figure
59457	M	1000	41.4	16	no	1	CA3	8	0	2, 3, S2
60047	F	None	82.8	20	no	1	GC	2	0	2, 4, S2
61092	F	500	55.2	21	yes	Inconclusive		2	0	2, S2
61144	M	500	55.2	21	yes	Inconclusive		4	0	2, S2
61159	M	500	55.2	22	yes	0		0	0	2, S2
61164	M	500	55.2	22	yes	Inconclusive		3	5	2, S2
59930	F	500	147.2	23	no	3	GC, CA, sl	12	0	2, S2
59931	F	500	101.2	23	no	4	2xGC, CA1, Sub	38	0	2, S2
59944	F	500	46	23	no	3	2xCA1, CA1sr	11	0	2, S2
59946	F	500	92	23	no	Inconclusive		30	0	2, S2
59975	M	500	115	23	no	Inconclusive		1	0	2, S2
60650	F	500	69	24	yes	2	CA, WM	101	0	2, S2
60651	F	500	55.2	24	yes	Inconclusive		33	0	2, S2
59943	M	500	46	25	no	0		0	0	2, S2
59977	M	500	55.2	25	no	Inconclusive		32	33	2, S2
59979	F	500	55.2	26	no	Inconclusive		7	0	2, S2
60652	F	500	55.2	26	yes	1	GC	36	0	2, 4, S2
60821	M	500	55.2	26	yes	Inconclusive		116	5	2, S2
60222	F	500	55.2	27	no	Inconclusive		72	0	2, S2
60221	F	500	55.2	27	no	Inconclusive		50	2	2, S2
60822	M	500	55.2	27	yes	Inconclusive		7	0	2, S2
60823	F	500	55.2	27	yes	2	CA3sr, CA3	668	135	2, S2
60259	F	500	55.2	28	yes	1	DG	35	4	2, 4, S2
60824	F	500	55.2	28	yes	4	GC, CA3, WM, CA1so	74	28	2, S2
60825	F	500	55.2	28	yes	Inconclusive		54	0	2, S2
60218	M	500	55.2	29	no	0		0	0	2, S2
60919	F	500	55.2	29	yes	Inconclusive		8	0	2, S2
60920	F	500	55.2	29	yes	0		0	0	2, S2
60219	M	500	55.2	30	no	1	CA so	27	0	2, 3, S2
60389	M	500	55.2	30	no	Inconclusive		74	21	2, S2
60390	M	500	69	30	yes	Inconclusive		97	0	2, S2

Table S1: Experimental details and analysis of animals used for single cell experiments

All animals were injected with Cre at E13 and animals with a single starter cell are highlighted in bold.

The number of rabies positive cells in the dorsal hippocampus include starter cells. The table is sorted by the 'Days with rabies' column. All CA/CA3/CA2/CA1 cells are in the pyramidal cell layer unless indicated to be in so or sr.

hipp: dorsal hippocampus, EC: entorhinal cortex, CA: cell in the CA3/CA2/CA1 border area, GC: granule cell, Sub: cell in the subiculum, WM: cell in the white matter, sl: cell in stratum lucidum, so: cell in stratum oriens, sr: cell in stratum radiatum

Animal ID	Sex	Embryonic day for Cre injection	Cre dilution	Helper virus (nl)	Days with rabies	Experiment	Figure
72359	M	N/A	N/A	N/A	14	WT with rabies	S1
58695	M	E12	None	404.8	14	Cre, N2cG and rabies	S1
58482	M	E13	500	N/A	N/A	Check of Cre expression	S1
58483	M	E13	500	N/A	N/A	Check of Cre expression	S1
70375	M	N/A (adult injection)	N/A	151.8	20	Optogenetics	S3
58313	F	E12	None	404.8	30	Optogenetics	5, S4
58253	F	E14	None	404.8	24	Ca ²⁺ imaging	6
60388	M	E13	500	55.2	34	Ca ²⁺ imaging	7

Table S2: Experimental details of animals used for control and functional experiments

WT: wildtype (i.e. mouse not injected with Cre *in utero*). The TSA Plus staining protocol was not used with any of these animals.