

**Table S1. Summary of statistics for Figures 1, 3, 4, 5, 6, and 7.**

Figures		Variable	statistics	N	F value	P value	Post hoc test
<b>Figure 1</b>	<b>C</b>	Core + Penumbra area of 3 dpi	Two-tailed t-test	7 dpi: 8 28 dpi: 4 Nd 3: 7 Nd 7: 4 Nd 28: 5	F=0.15 F=0.47 F=0.63 F=0.12 F=0.48	P < 0.001 P < 0.001 P < 0.001 P < 0.001 P < 0.001	-
	<b>D</b>	Soma size of con	Two-tailed t-test	3 dpi: 38 7 dpi: 38 28 dpi: 38 Nd 3: 31 Nd 7: 29 Nd 28: 24	F < 0.05 F < 0.05 F=0.62 F < 0.05 F < 0.05 F=0.1	P < 0.001 P < 0.001 P=0.69 P < 0.001 P < 0.001 P=0.99	-
	<b>E</b>	GFP F. I. of con	Two-tailed t-test	3 dpi: 13 7 dpi: 13 28 dpi: 4 Nd 3: 7 Nd 7: 4 Nd 28: 4	F < 0.05 F=0.09 F=0.2 F=0.21 F < 0.05 F=0.67	P < 0.001 P < 0.001 P < 0.001 P=0.001 P=0.17 P=0.28	-
	<b>F</b>	DAPI num. of con	Two-tailed t-test	3 dpi: 13 7 dpi: 13 28 dpi: 4 Nd 3: 7 Nd 7: 4 Nd 28: 4	F=0.05 F=0.63 F=0.92 F=0.89 F=0.49 F=0.5	P=0.75 P < 0.001 P < 0.001 P=0.84 P=0.26 P=0.45	-
<b>Figure 3</b>	<b>A</b>	Num. of spikes	Two-way ANOVA	3 dpi: 17 7 dpi: 13 28 dpi: 11	65.83	P < 0.001	Tukey's multiple comparison
	<b>B</b>	Vm	Two-tailed t-test	Nd 3: 16 Nd 7: 9 Nd 28: 14	F=0.2 F=0.68 F=0.3 F=0.34 F=0.72 F=0.18	P=0.71 P=0.56 P=0.89 P=0.78 P=0.51 P=0.64	-
	<b>C</b>	I/V	Two-way ANOVA		11.98	P < 0.001	Tukey's multiple comparison
	<b>D</b>	Rheobase of con	Two-tailed t-test		3 dpi: 0.18 7 dpi: 0.41 28 dpi: F < 0.05 Nd 3: F < 0.05 Nd 7: 0.34 Nd 28: 0.43	P=0.001 P=0.19 P=0.06 P=0.41 P=0.17 P=0.003	-
	<b>E</b>	Rm of con	Two-tailed t-test		3 dpi: F < 0.05 7 dpi: 0.19 28 dpi: F < 0.05 Nd 3: 0.2 Nd 7: F < 0.05 Nd 28: 0.4	P=0.07 P=0.67 P=0.99 P=0.74 P=0.03 P=0.03	-
	<b>F</b>	Cm	Two-tailed t-test		3 dpi: 0.59 7 dpi: 0.98 28 dpi: F < 0.05 Nd 3: 0.61 Nd 7: F < 0.05 Nd 28: 0.33	P=0.002 P=0.02 P=0.33 P=0.02 P < 0.001 P=0.006	-
	<b>G</b>	Peak amp. 30	Two-tailed t-test		3 dpi: F < 0.05 7 dpi: 0.06	P=0.22 P=0.38	-

Figure 4	H	pA	test		28 dpi: F < 0.05	P=0.25	-
		90 pA			3 dpi: 0.1 7 dpi: F < 0.05 28 dpi: 0.4	P=0.17 P=0.02 P=0.06	
		150 pA			3 dpi: 0.16 7 dpi: 0.06 28 dpi: 0.43	P=0.17 P=0.03 P=0.09	
		Half-width 30 pA	3 dpi: F < 0.05 7 dpi: F < 0.05 28 dpi: 0.41		P=0.26 P=0.15 P=0.39		
		90 pA	3 dpi: 0.23 7 dpi: 0.99 28 dpi: 0.52		P=0.78 P=0.53 P=0.85		
		150 pA	3 dpi: F < 0.05 7 dpi: F < 0.05 28 dpi: F < 0.05		P=0.71 P=0.06 P=0.49		
	J	Freq. of sIPSC Con	Two-tailed t-test	Con: 14 3 dpi: 16 7 dpi: 16 28 dpi: 14	3 dpi: F < 0.05 7 dpi: 0.86 28 dpi: 0.45	P=0.04 P=0.45 P=0.28	-
		3 dpi			7 dpi: F < 0.05 28 dpi: 0.06	P=0.003 P=0.34	
	K	Peak amp. of sIPSC Con	Two-tailed t-test		3 dpi: 0.21 7 dpi: 0.51 28 dpi: 0.81	P=0.02 P=0.195 P=0.89	-
		3 dpi			7 dpi: 0.54 28 dpi: 0.32	P=0.24 P=0.02	
	L	Freq. of sEPSC Con	Two-tailed t-test		3 dpi: 0.06 7 dpi: 0.57 28 dpi: 0.11	P=0.01 P=0.3 P=0.93	-
	M	Peak amp. of sEPSC	Two-tailed t-test		3 dpi: F < 0.05 7 dpi: F < 0.05 28 dpi: 0.69	P=0.5 P=0.66 P=0.09	-
	N	E/I amp. ratio	Two-tailed t-test		3 dpi: F < 0.05 7 dpi: 0.84 28 dpi: F < 0.05	P=0.18 P=0.44 P=0.16	-
	O	E/I freq. ratio Con	Two-tailed t-test		3 dpi: F < 0.05 7 dpi: F < 0.05 28 dpi: 0.54	P < 0.001 P=0.47 P=0.14	-
	A	Current density	Two-way ANOVA	Con: 28 3 dpi: 30 7 dpi: 15 28 dpi: 15 Nd 3: 11 Nd 7: 11	175.4	P < 0.001	Tukey's multiple comparison
		-150 mV con	Two-tailed t-test		3 dpi: F < 0.05 7 dpi: F < 0.05 28 dpi: 0.64 Nd 3: 0.24 Nd 7: 0.64	P < 0.001 P < 0.001 P=0.001 P=0.78 P=0.08	-
		-50 mV con			3 dpi: F < 0.05 7 dpi: 0.32 28 dpi: F < 0.05 Nd 3: 0.89 Nd 7: 0.21	P < 0.001 P < 0.001 P=0.02 P=0.35 P=0.49	
		50 mV con			3 dpi: F < 0.05 7 dpi: 0.13 28 dpi: 0.17 Nd 3: F < 0.05 Nd 7: 0.06	P < 0.001 P=0.02 P=0.25 P < 0.001 P=0.21	
	B	Vm	Two-		3 dpi: 0.769	P=0.09	-

		Con	tailed t-test		7 dpi: 0.2 28 dpi: 0.38 Nd 3: 0.49 Nd 7: 0.29	P=0.39 P=0.003 P=0.68 P=0.39	
	<b>C</b>	Vr Con	Two-tailed t-test		3 dpi: F < 0.05 7 dpi: F < 0.05 28 dpi: F < 0.05 Nd 3: 0.06 Nd 7: F < 0.05	P < 0.001 P < 0.001 P=0.001 P=0.61 P=0.21	
	<b>D</b>	Cm Con	Two-tailed t-test		3 dpi: F < 0.05 7 dpi: 0.9 28 dpi: 0.56 Nd 3: 0.52 Nd 7: 0.41	P=0.03 P=0.72 P=0.93 P=0.32 P=0.98	-
	<b>E</b>	Rm Con	Two-tailed t-test		3 dpi: F < 0.05 7 dpi: F < 0.05 28 dpi: 0.38 Nd 3: 0.49 Nd 7: F < 0.05	P < 0.001 P < 0.001 P < 0.001 P=0.48 P=0.49	-
	<b>N</b>	-150 mV con	Two-tailed t-test	Cs: 5 Ba: 10 4AP: 9 Qui.: 15 ML133: 16 Pax.: 10 A740.: 11 Sur.: 12	Cs: 0.35 Ba: 0.05 4AP: 0.45 Qui.: 0.44 ML133: 0.1 Pax.: 0.14 A740.: 0.92 Sur.: 0.99	P=0.55 P=0.55 P < 0.001 P=0.89 P=0.04 P=0.02 P=0.001 P < 0.001	-
		-150 mV 3 dpi			Cs: F < 0.05 Qui.: F < 0.05 4AP: F < 0.05 Ba: F < 0.05 ML133: F < 0.05 Pax.: F < 0.05 A740.: F < 0.05 Sur.: F < 0.05	P < 0.001 P < 0.001 P=0.003 P < 0.001 P < 0.001 P=0.01 P < 0.001 P=0.003	
		-50 mV Con			Cs: 0.91 Ba: F < 0.05 4AP: 0.09 Qui.: 0.99 ML133: 0.3 Pax.: 0.55 A740.: F < 0.05 Sur.: 0.69	P=0.17 P=0.02 P=0.005 P=0.25 P=0.09 P=0.63 P=0.78 P=0.02	
		-50 mV 3 dpi			Cs: F < 0.05 Ba: 0.54 4AP: 0.15 Qui.: F < 0.05 ML133: F < 0.05 Pax.: F < 0.05 A740.: F < 0.05 Sur.: F < 0.05	P < 0.001 P=0.67 P=0.07 P < 0.001 P < 0.001 P=0.001 P < 0.001 P=0.003	
		50 mV Con			Cs: 0.19 Ba: F < 0.05 4AP: F < 0.05 Qui.: F < 0.05 ML133: F < 0.05 Pax.: F < 0.05 A740.: F < 0.05 Sur.: F < 0.05	P=0.11 P < 0.001 P=0.007 P=0.84 P < 0.001 P=0.01 P < 0.001 P < 0.001	

		50 mV 3 dpi			Cs: F < 0.05 Qui.: F < 0.05 4AP: F < 0.05 Ba: F < 0.05 ML133: F < 0.05 Pax.: 0.08 A740.: F < 0.05 Sur.: F < 0.05	P < 0.001 P < 0.001 P < 0.001 P < 0.001 P < 0.001 P < 0.001 P < 0.001 P < 0.001	
<b>Figure 5</b>	<b>A</b>	Num. of spikes	Two-way ANOVA	Con: 29 3 dpi: 16 TNF $\alpha$ : 11	102.8	P < 0.001	Tukey's multiple comparison
	<b>B</b>	I/V	Two-way ANOVA	IL1 $\beta$ : 11 IL10: 10 IL4: 16 ATP(1mM): 14 ATP $\gamma$ S (100 $\mu$ M): 6	47.63	P < 0.001	Tukey's multiple comparison
	<b>C</b>	Num. of spikes	Two-way ANOVA	Con: 29 3 dpi: 16 3 dpi + IL10: 7	122.1	P < 0.001	Tukey's multiple comparison
	<b>D</b>	I/V	Two-way ANOVA	3 dpi + IL4: 11	66.09	P < 0.001	Tukey's multiple comparison
<b>Figure 6</b>	<b>A</b>	Current density	Two-way ANOVA	TNF $\alpha$ : 8 IL1 $\beta$ : 7 IL10: 7 IL4: 9 ATP $\gamma$ S (100 $\mu$ M): 7 ATP $\gamma$ S (300 $\mu$ M): 14	15.97	P < 0.001	Tukey's multiple comparison
		-150 mV			TNF $\alpha$ : 0.57 IL1 $\beta$ : F < 0.05 IL10: 0.16 IL4: 0.81 ATP $\gamma$ S (100 $\mu$ M): F < 0.05 ATP $\gamma$ S (300 $\mu$ M): 0.13	P=0.17 P=0.09 P=0.81 P=0.12 P=0.003 P=0.39	-
		-50 mV			TNF $\alpha$ : 0.34 IL1 $\beta$ : 0.64 IL10: F < 0.05 IL4: 0.4 ATP $\gamma$ S (100 $\mu$ M): F < 0.05 ATP $\gamma$ S (300 $\mu$ M): 0.34	P=0.01 P=0.69 P=0.003 P=0.36 P=0.05 P=0.72	
		50 mV			TNF $\alpha$ : 0.66 IL1 $\beta$ : 0.3 IL10: F < 0.05 IL4: 0.61 ATP $\gamma$ S (100 $\mu$ M): 0.97 ATP $\gamma$ S (300 $\mu$ M): F < 0.05	P=0.78 P=0.24 P=0.003 P=0.31 P=0.91 P=0.14	
	<b>B</b>	Current density	Two-way ANOVA	TNF $\alpha$ : 9 IL1 $\beta$ : 11 IL10: 8 IL4: 11 ATP: 14	16.5	P < 0.001	Tukey's multiple comparison
		-150 mV			TNF $\alpha$ : 0.51 IL1 $\beta$ : 0.96 IL10: F < 0.05 IL4: 0.56 ATP: F < 0.05	P=0.04 P=0.59 P=0.01 P=0.4 P=0.003	-
		-50 mV			TNF $\alpha$ : 0.55 IL1 $\beta$ : 0.4	P=0.23 P=0.69	

		50 mV			IL10: 0.12 IL4: 0.11 ATP: 0.32	P=0.88 P=0.11 P=0.69	
					TNF $\alpha$ : 0.79 IL1 $\beta$ : 0.08 IL10: F < 0.05 IL4: 1 ATP: 0.14	P=0.03 P=0.59 P=0.08 P=0.27 P=0.22	
	<b>C</b>	Current density	Two-way ANOVA	IL1 $\beta$ +TNF $\alpha$ : 12 IL4+IL10: 12	11.08	P<0.001	Tukey's multiple comparison
		-150 mV		IL1 $\beta$ +TNF $\alpha$ +IL4+IL10: 11	IL1 $\beta$ +TNF $\alpha$ : 0.52 IL4+IL10: 0.4 IL1 $\beta$ +TNF $\alpha$ +IL4+IL10 : 0.08	P=0.22 P=0.73 P=0.7	-
		-50 mV			IL1 $\beta$ +TNF $\alpha$ : 0.89 IL4+IL10: 0.56 IL1 $\beta$ +TNF $\alpha$ +IL4+IL10 : 0.12	P=0.67 P=0.49 P=0.78	
		50 mV			IL1 $\beta$ +TNF $\alpha$ : 0.51 IL4+IL10: 0.08 IL1 $\beta$ +TNF $\alpha$ +IL4+IL10 : 0.21	P=0.39 P=0.44 P=0.62	
	<b>D</b>	Current density	Two-way ANOVA	3 dpi+IL4: 14 3 dpi+IL10: 8	95.74	P<0.001	Tukey's multiple comparison
		-150 mV 3 dpi		3dpi+IL4+IL10: 12	3 dpi+IL4: 0.09 3 dpi+IL10: 0.07 3 dpi+IL4+IL10: 0.67	P =0.53 P=0.009 P=0.05	-
		-50 mV 3 dpi			3 dpi+IL4: F < 0.05 3 dpi+IL10: 0.72 3 dpi+IL4+IL10: 0.61	P =0.09 P=0.16 P=0.17	
		50 mV 3 dpi			3 dpi+IL4: 0.42 3 dpi+IL10: 0.07 3 dpi+IL4+IL10: F < 0.05	P =0.06 P=0.003 P =0.06	
<b>Figure 7</b>	<b>A</b>	Num. of spikes	Two-way ANOVA	Con: 29 3 dpi: 16 3 dpi+sur.: 12	100.2	P < 0.001	Tukey's multiple comparison
	<b>B</b>	I/V	Two-way ANOVA	3 dpi+4AP: 11	12.02	P < 0.001	Tukey's multiple comparison
	<b>C</b>	Vm con	Two-tailed t-test	TNF $\alpha$ : 11 TNF $\alpha$ +sur.: 10 TNF $\alpha$ +4AP: 10	3 dpi+sur.: 0.46 3 dpi+4AP: 0.74 TNF $\alpha$ +sur.: 0.85 TNF $\alpha$ +4AP: 0.2	P < 0.001 P < 0.001 P=0.54 P=0.009	-
	<b>D</b>	Rheobase con	Two-tailed t-test		3 dpi+sur.: F < 0.05 3 dpi+4AP: F < 0.05 TNF $\alpha$ +sur.: F < 0.05 TNF $\alpha$ +4AP: 0.34	P < 0.001 P=0.1 P=0.88 P=0.09	-
	<b>E</b>	Cm con	Two-tailed t-test		3 dpi+sur.: 0.31 3 dpi+4AP: 0.86 TNF $\alpha$ +sur.: 0.31 TNF $\alpha$ +4AP: 0.13	P=0.17 P=0.89 P=0.74 P=0.006	-
	<b>F</b>	Rm Con	Two-tailed t-test		3 dpi+sur.: F < 0.05 3 dpi+4AP: F < 0.05 TNF $\alpha$ +sur.: 0.24 TNF $\alpha$ +4AP: 0.28	P=0.53 P=0.002 P=0.02 P=0.01	-

Data are mean  $\pm$  SEM. Asterisks (\*) mark significance compared to control group and hashtags (#) mark significance compared to 3 dpi group. \*/#  $p < 0.05$ , \*\*/##  $p < 0.01$ , \*\*\*/###  $p < 0.001$ .