Supplementary Table 1: Data as mean ± sem

Fig #	units	Sham-ACSF/Saline	Sham Drug (CLI095 or LPS-RSU)	FPI ACSF/saline	Sham Drug (CLI095 or LPS-RSU)
1d	mV	0.21±0.08	1.04±0.17	1.77±0.49	0.14±0.11
1e	mV/ms	0.96±0.13	1.99±0.15	2.52±0.34	0.83±0.18
1g	a.u	0.90±0.05	1.03±0.12	0.12±0.02	0.67±0.06
1i	a.u	100±0.0	101.7±4.56	137.18±8.4	110.18±5.34
1j	a.u	100±0.0	105.34±7.30	108.96±9.67	103.78±7.25
1k	a.u	100±0.0	108.80±5.50	108.8±6.96	108.00±7.74
1l	a.u	100±0.0	107.80±3.83	106.00±6.54	112.10±8.50
5c	mV	0.02±0.01	0.85±0.16	1.50±0.15	0.45±0.11
5f	min.	46±0.89	19.22±1.34	9.85±0.44	113.66±20.71
5g	min.	47.12±1.44	18.12±1.00	11±0.96	119.00±8.70
6b	min.	47.71±1.76	15.62±1.54	13.85±2.12	180±0
6d	Min.	52.15±4.27	15.63±1.5	13.75±1.96	180±0
6h	min.	41.62±1.53	17.57±1.39	12.37±1.91	9.85±1.35
7c	a.u	1.00±0	1.04±0.10	3.16±1.09	0.95±0.08
7d	a.u	1.00±0	0.89±0.04	1.93±0.22	1.15±0.09
7e	a.u	1.00±0	0.93±0.50	1.58±0.12	0.91±0.09
7h	# of cells	8.17±3.47	7.01±1.95	50.60±11.75	18.09±5.10
7i	# of cells	70.17±16.49	97.78±20.68	1228.93±316.49	215.60±29.91
7j	# of cells	227.81±14.55	138.33±15.59	66.80±13.07	207.77±17.95
Fig #		**WT**	**KO**		
2d	a.u	0.16±0.02	1.33±0.80		
Fig #		**ACSF**	**HMGB1**	**LPS-RSU**	
2f	a.u	0.16±0.02	0.12±0.03	0.92±0.16	
Fig #		**SHAM**	**FPI**		
3c	min.	50.44±1.71	12.63±1.24		
4b	a.u	0%	62%		
8c	pA.sec	17.21±0.93	87.02±10.83		
Fig #		**ACSF**	**LPS-RSU**	**LPS-RSU +Ampakine**	
8e	pA.sec	87.02±10.83	26.73±3.02	208.95±2.71	
Fig #		**Saline**	**LPS-RSU**	**LPS-RSU +Ampakine**	
8h	min.	13.75±1.96	180±0	41±4.59	

Supplementary Table 2: Statistical analysis details

Figure number	Test Used		n		Descriptive stats (Average, variance)	P Value	DEGREES OF FREEDOM & F/t/z/R/ETC VALUE
	Which test	Section & Paragraph #	Exact value	Defined	Reported	Exact Value	Value
1 d	Two way RM ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend	5, 6	No. of Slices from at least 3 rats/group	Error bars are mean +/- s.e.m.	P=0.011	F(1,9)=10.16
1 e	Two way RM ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend	5, 6	No. of Slices from at least 3 rats/group	Error bars are mean +/- s.e.m.	P<0.001	F(1,9)=23.064
1 g	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend; Result para 1	6 in each group	No. of cells from at least 3 rats/group	Error bars are mean +/- s.e.m.	P=0.009	F(1,20)=8.437
1 i	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend: Result para 1	6 in each group	No. of Slices from at least 3 rats/group	Error bars are mean +/- s.e.m.	P=0.0017	F(1,20)=6.80
1 j	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend; Result para 1	6 in each group	No. of Slices from at least 3 rats/group	Error bars are mean +/- s.e.m.	p-0.465	F(1,20)=0.465
1 k	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend: Result para 1	6 in each group	No. of Slices from at least 3 rats/group	Error bars are mean +/- s.e.m.	P=0.573	F(1,20)=0.328
1 l	TW ANOWA test, followed by a Tukey's multiple	Fig. legend; Result para 1	6 in each group	No. of Slices from at least 3 rats/group	Error bars are mean +/- s.e.m.	p-0.883	F(1,20)=0.022

	comparison test						
2 e	One way ANOWA by ranks, followed by a Tukey's multiple comparison test	Fig. legend; Result para 2	7 in each group	No. of cells from at least 3 different well plates per group	Error bars are mean +/- s.e.m	P=0.001	H=13.588 with 2 degrees of freedom
3 c	Student's T-Test	Fig. legend; Result para 3	9,12	No. of rats per group	Error bars are mean +/- s.e.m	P<0.001	T=17.357
5 c	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend; Result para 4	6 in each group	No. of Slices from at least 3 rats/group	Error bars are mean +/- s.e.m	P<0.001	F(1,20)=32.072
5 f	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend; Result para 5	8 in each group	No. of rats per group	Error bars are mean +/- s.e.m	P<0.001	F(1,28)=127.762
5 g	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend; Result para 5	8 in each group	No. of rats per group	Error bars are mean +/- s.e.m	P<0.001	F(1,28)=235.256
6 b	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend; Result para 6	8 in each group	No. of rats per group	Error bars are mean +/- s.e.m	P<0.001	F(1,28)=1341.31
6 d	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend; Result para 6	8 in each group	No. of rats per group	Error bars are mean +/- s.e.m	P<0.001	F(1,28)=3975.11
6 h	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend; Result para 7	7 in each group	No. of rats per group	Error bars are mean +/- s.e.m	P<0.001	F(1,24)=47.046
7 c	One way ANOWA by ranks, followed by a Tukey's	Fig. legend; Result para 8	6 in each group	No. of hippocampal tissue per group	Error bars are mean +/- s.e.m	P=0.010	H=11.37 with 3 degrees of freedom

	multiple comparison test						
7 d	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend; Result para 8	6 in each group	No. of hippocampal tissue per group	Error bars are mean +/- s.e.m	P=0.014	F(1,20)=7.310
7 e	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend; Result para 8	6 in each group	No. of hippocampal tissue per group	Error bars are mean +/- s.e.m	P=0.002	F(1,20)=13.266
7 h	One way ANOWA by ranks, followed by a Student-Newman – Keuls multiple comparison test	Fig. legend; Result para 8	12 in each group	No. of hippocampal tissue per group	Error bars are mean +/- s.e.m	P = 0.002	H = 14.798 with 3 degrees of freedom.
7 i	One way ANOWA by ranks, followed by a Student-Newman – Keuls multiple comparison test	Fig. legend; Result para 8	12 in each group	No. of hippocampal tissue per group	Error bars are mean +/- s.e.m	P <0.001	H = 30.874 with 3 degrees of freedom.
7 j	TW ANOWA test, followed by a Tukey's multiple comparison test	Fig. legend; Result para 8	12,10,11,10	No. of slices from 3 to 5 rats/group	Error bars are mean +/- s.e.m	P<0.001	F(1,35)=56.65
8 c	Mann Whitney test	Fig. legend; Result para 9	5	No. of cells from 3 rats/group	Error bars are mean +/- s.e.m	P=0.008	T=15.00
8 e	One way ANOWA by ranks, followed by a Tukey's multiple comparison test	Fig. legend; Result para 9	5 in each group	No. of cells from 3 rats/group	Error bars are mean +/- s.e.m	P=0.004	H=11.06
8 h	One way ANOWA test, followed by a Tukey's	Fig. legend; Result para 9	7 in each group	No. of rats per group	Error bars are mean +/- s.e.m	P<0.001	F(2,18)=1106.708

	multiple comparison test					

Supplementary Table 3: Antibodies

Antibody	Type	Dilution	Company	Catalog Number	Figure #
TLR4	Rabbit Polyclonal	1:500	Santa Cruz	H-80	Fig 1a
TLR4	Mouse Monoclonal	1:1000	Cell Signaling	2219	Fig 7b,c
MAP2	Chicken Polyclonal	1:1000	AbCam	ab5392	Fig. 2a
NeuN	Mouse monoclonal	1:1000	Millipore	MAB377	Fig. 1a
GluA1	Rabbit Polyclonal	1:1000	Millipore	MAB1504	Fig 1h
GluA2	Mouse monoclonal	1:1000	Millipore	MAB397	Fig 1h
GFAP	Mouse monoclonal	1:1000	Millipore	MAB360	Fig 2b, 7b
IBA-1	Mouse monoclonal	1:1000	Millipore	MABN92	Fig 2b, 7b
β-actin	Mouse monoclonal	1:5000	Sigma-Aldrich	A5441	Fig 1h,7b
CD45	Mouse IgG1	1:50	BD Biosciences	740258	Fig7f
CD45 Isotype control	Mouse IgG1	1:50	BD Biosciences	563547	-
CD4	Mouse IgG2a	1:50	BD Biosciences	550296	Fig 7f
CD4 Isotype	Mouse IgG2a	1:50	BD Biosciences	550339	-
CD3	Mouse IgM	1:50	BD Biosciences	557030	Fig 7f
CD3 Isotype Control	Mouse IgM	1:50	BD Biosciences	550883	-
Ox42	Mouse IgG2a	1:100	BioLegend	201820	Fig 7f
Ox42 Isotype Control	Mouse IgG2a	1:100	BioLegend	400258	-
Gr1	Mouse IgG2a	1:50	BD Biosciences	550002	Fig 7f
Gr-1 Isotype Control	Mouse IgG2a	1:50	BD Biosciences	553457	-