

TABLE S1

Primary Antibody	Dilution	Incubation	Application	Host	Company	Clone/Catalog No.
GFAP	1:400	Over night, 4°C	IF	Chicken	Novus	NPP1-05198
GFAP	1:100	Over night, 4°C	WB	Rabbit	Sigma-Aldrich Millipore	AB5804
Calbindin	1:400	Over night, 4°C	IF	Mouse	Sigma-Aldrich Millipore	CB-955
Calbindin	1:400	Over night, 4°C	IF	Rabbit	Cell Signaling Tech.	13176S
CD68	1:800	Over night, 4°C	IF	Rat	Sigma-Aldrich Millipore	FA-11
SLC1A3	1:1000	Over night, 4°C	WB	Rabbit	ThermoFischer Scientific	PA5-19709
ACSA-2-APC	1:100	30 minutes, 4°C	FC	Rat	Miltenyi Biotec	IH3-18A3
GLAST-PE	1:200	Over night, 4°C	FC	Mouse	Miltenyi Biotec	ACSA-1
Beta-Tubulin	1:5000	Over night, 4°C	WB	Mouse	Sigma-Aldrich Millipore	
Secondary Antibody	Dilution	Incubation	Application	Host	Company	Clone/Catalog No.
anti-Chicken conjugated to Alexa-Fluor 488	1:2000	1 hour, room temperature	IF	Goat	ThermoFischer Scientific	A-11039
anti-Mouse conjugated to Alexa-Fluor 488	1:2000	1 hour, room temperature	IF	Goat	ThermoFischer Scientific	A28175
anti-Mouse conjugated to DyLight-594	1:2000	1 hour, room temperature	IF	Goat	ThermoFischer Scientific	35510
anti-Mouse conjugated to Alexa-Fluor-633	1:2000	1 hour, room temperature	IF	Goat	ThermoFischer Scientific	A-21052
anti-Rabbit conjugated to Alexa-Fluor 488	1:2000	1 hour, room temperature	IF	Goat	ThermoFischer Scientific	A27034
anti-Rabbit conjugated to AlexaFluor-594	1:2000	1 hour, room temperature	IF	Goat	ThermoFischer Scientific	R37119
anti-Rabbit conjugated to Alexa-Fluor-633	1:2000	1 hour, room temperature	IF	Goat	ThermoFischer Scientific	A-21071
anti-Rabbit Horseradish Peroxidase	1:20000	1 hour, room temperature	WB	Goat	ThermoFischer Scientific	65-6120
anti-mouse Horseradish Peroxidase	1:20000	1 hour, room temperature	WB	Goat	ThermoFischer Scientific	62-6520
Reagent	Dilution	Incubation	Application	Host	Company	Clone/Catalog No.
Hoechst 3342	1:5000	15 minutes, room temperature	IF	N/A	ThermoFischer Scientific	62249
Blue Live/Dead	1:200	10 minutes, 4°C	FACS	N/A	ThermoFischer Scientific	L23105
Goat Serum	1:20	1 hour, 4°C	IF	N/A	Sigma-Aldrich Millipore	G9023
30% Bovine Serum Albumin	1:10	10 minutes, 4°C	FACS	Bovine	Sigma-Aldrich Millipore	A9576-50ML
TruStain FcX	1:100	10 minutes, 4°C	FACS	Rat	Biologend	101320
Bovine Serum Albumin	2% w/v		WB		Sigma-Aldrich Millipore	A7030
Paraformaldehyde	4% w/v		IF		Sigma-Aldrich Millipore	A6148
NuPAGE			WB		Sigma-Aldrich Millipore	NP0002
T-PER			WB		ThermoFischer Scientific	#78510
cOmplete™ Protease Inhibitor Cocktail			WB		Sigma-Aldrich Millipore	11697498001
Ceftriaxone			cell culture, mouse treatment		Cayman	18866
Riluzole			cell culture, mouse treatment		Selleckchem	S1614
Miglustat			cell culture		Sigma-Aldrich Millipore	72599-27-0
Hydroxy-Propyl-β-Cyclodextrin			cell culture		Roquette	
DMEM			cell culture		ThermoFischer Scientific	41965-062
Penicillin-Streptomycin			cell culture		ThermoFischer Scientific	15140-122
Fetal Bovine Serum			cell culture		Gemini	100-500
0.05% Trypsin-EDTA			cell culture		ThermoFischer Scientific	25-300-054
Clarity Western ECL			WB		BioRad	705061
DMSO					Sigma-Aldrich Millipore	D2650
2-Mercaptoethanol			WB		Sigma-Aldrich Millipore	M6250
Glutamate Assay Kit			cell culture		CellBiolabs	MET-5080
Poly-L-Lysine			cell culture		ScienCell	0403
KAPA Taq ReadyMix			Genotyping		Sigma-Aldrich Millipore	KK1006
Taqman Probes	Dilution	Application	Company	Clone/Catalog No.		
mmuActb	1:20	PCR	ThermoFischer Scientific	Mm00607939		
mmuSlc1a3	1:20	PCR	ThermoFischer Scientific	Mm00600697		
mmuSlc1a2	1:20	PCR	ThermoFischer Scientific	Mm01275814		
mmuGfap	1:20	PCR	ThermoFischer Scientific	Mm01253033		
Software	Host	Company	Version			
Prism 5	64bits Windows 7	Graphpad	Version 5.01			
R/Rstudio	64bits Windows 7	CRAN foundation	Version 1.1.463			
MS Office 2016	64bits Windows 7	Microsoft				
7300 System Sequence Detection	32bits Windows XP	Applied Biosystem	Version 1.4.0.25			
ZEN2(Blue)	64bits Windows 7	Zeiss				
Image Lab Software	64bits Windows 7	BioRad	Version 3.0.1			
ImageJ	64bits Windows 7	NIH	Version 1.52i			
Primers	Sequence	Application	Company			
Npc1_F	GGACAGCCAAGTAGGCGAC	PCR Npc1 KO	Integrated DNA Technologies			
Npc1_R	GACGTGTGCACCCCCTTTC	PCR Npc1 KO	Integrated DNA Technologies			
Human Brain samples	Company					
UMB#754	NICHD Blood and Tissue Bank					
UMB#1841	NICHD Blood and Tissue Bank					
UMB#914	NICHD Blood and Tissue Bank					
UMB#5282	NICHD Blood and Tissue Bank					
UMB#4237	NICHD Blood and Tissue Bank					
UMB#4770	NICHD Blood and Tissue Bank					
UMB#5372	NICHD Blood and Tissue Bank					
UMB#M4002M	NICHD Blood and Tissue Bank					