
Supplementary information

Tau induces PSD95–neuronal NOS uncoupling and neurovascular dysfunction independent of neurodegeneration

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Tau induces PSD95-nNOS uncoupling and neurovascular dysfunction independent of neurodegeneration

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Supplementary Table 1. Primary antibody list

Primary antibodies for immunofluorescent staining

Name	Clone	Host	Antibody type	IgG subclasses	Working dilution	Catalog number	Suppliers
AQP4	D1F8E	Rabbit	Monoclonal	IgG	1:200	59678	Cell Signaling
CD31	MEC 13.4	Rat	Monoclonal	IgG _{2a} , k	1:30	553371	BD Biosciences
GFAP	G-A-5	Mouse	Monoclonal	IgG ₁	1:1000	G3893	Sigma
Iba-1	---	Rabbit	Policlonal	---	1:500	019-19741	Wako Chemical
MBP	12	Rat	Monoclonal	IgG _{2a}	1:500	MAB386	EMD Millipore
MAP2	---	Rabbit	Policlonal	---	1:500	M3696	Sigma
NeuN	EPR12763	Rabbit	Monoclonal	IgG	1:100	ab177487	abcam
Phospho-Tau	AT8	Mouse	Monoclonal	IgG ₁	1:200	MN1020	ThermoFisher

Primary antibodies for Western Blotting

Name	Clone	Host	Antibody type	IgG subclasses	Working dilution	Catalog number	Suppliers
CamKII	Cba-2	Mouse	Monoclonal	IgG _{2a} , k	1:500	13-7300	ThermoFisher
GAPDH	6C5	Mouse	Monoclonal	IgG ₁	1:500	CB1001	EMD Millipore
GluN2B	13	Mouse	Monoclonal	IgG _{2b}	1:500	610416	BD Biosciences
MEK1/2	---	Rabbit	Polyclonal	---	1:1000	9122	Cell Signalling
nNOS	---	Rabbit	Polyclonal	---	1:2000	BML-SA227	Enzo Life Sciences
PSD95	16	Mouse	Monoclonal	IgG ₁	1:250	610496	BD Biosciences
Phospho-Tau	AT8	Mouse	Monoclonal	IgG ₁	1:500	MN1020	ThermoFisher
Phospho-Tau	PHF-13	Mouse	Monoclonal	IgG _{2b}	1:1000	9632	Cell Signalling
Total Tau	Tau46	Mouse	Monoclonal	IgG ₁	1:1000	4019	Cell Signalling
Total Tau	TAU-5	Mouse	Monoclonal	IgG ₁	1:200	AHB0042	ThermoFisher
Synaptophysin	D35E4	Rabbit	Polyclonal	IgG	1:1000	5461S	Cell Signalling

Primary antibodies for immunoprecipitation

Name	Clone	Host	Antibody type	IgG subclasses	Working dilution	Catalog number	Suppliers
nNOS	PA3-032A	Rabbit	Polyclonal	IgG	4 µg	PA3-032A	ThermoFisher
PSD95	6G6-1C9	Mouse	Monoclonal	IgG _{2a}	4 µg	MA1-045	ThermoFisher
Total Tau	TAU-5	Mouse	Monoclonal	IgG ₁	4 µg	AHB0042	ThermoFisher
Isotype control	RMG2a-62	Rat	Monoclonal	IgG _{2a}	4 µg	407102	BioLegend
Isotype control	RMG1-1	Rat	Monoclonal	IgG ₁	4 µg	406602	BioLegend
Isotype control	Poly29108	Rabbit	Polyclonal	IgG	4 µg	910801	BioLegend

Supplementary Table 2. PCR primers used in the study

Genes	MGI symbol	Forward primers	Reverse primers
GluN1	Grin1	CTGCTCTCTGCAACCTGACTT	TGCCACTAGGGCAGTGAAG
GluN2A	Grin2a	TAGACCTTAGCAGGCCCTCTC	GAGCTTTTGTTCCTCCAAGAGT
GluN2B	Grin2b	ACGGCAGCAAATCCTACTTCT	ACCACTGGCTTATTGGTGACA
GluN2D	Grin2d	CTGGGGGACGATGAGATTGAG	AGCATGTAGAAGACACCTGCC
Human tau	Mapt	CCCAATCACTGCCTATACCC	CCACGAGAATGCGAAGGA
Mouse tau	Mapt	AGCCCTAAGACTCCTCCA	TGCTGTAGCCGCTTCGTTCT