Antigen	Type	Clone	Blocking serum /buffer	Primary antibody dilution	Source
IBA1	Rabbit polyclonal		Goat I-Block	1:500 IF 1:1000 IHC 1:1000 WB	Dako ThermoFisher
IBA1	Goat polyclonal		Donkey	1:500	Abcam
Trem2	Sheep polyclonal		Donkey	1:50	R&D Systems
GFAP	Goat polyclonal		Donkey	1:1000	ThermoFisher
GFAP	Rabbit polyclonal		I-Block	1:3000	Dako
Tuj1	Mouse monoclonal		I-Block	1:1000	Biolegend
CNPase	Mouse monoclonal		I-Block	1:1000	Abcam
Aβ1-16	Mouse monoclonal	6E10	Donkey I-Block	1:300 IF 1:2000 WB	Biolegend
Aβ17-24	Mouse monoclonal	4G8	Goat	1:1000 IF 1:4000 IHC	Biolegend
Aβ1-40	Rabbit monoclonal	3552	Donkey	1:2000	In-house antibody[6]
CD68	Rat monoclonal	FA-11	Goat	1:100	BioRad
Murine ApoE	Mouse monoclonal	HJ6.3/b	Donkey I-Block	1:300 IF 1:700 WB	D. Holtzman lab, Washington University [7]
Human ApoE	Mouse monoclonal	HJ15.7	Horse I-Block	1:3000 IHC 1:700 WB	D. Holtzman lab, Washington University [8]

Supplementary Table 1. List of antibodies used for experiments in mice and humans. IF – immunofluorescence staining; IHC – immunohistochemistry; WB-Western blot.

Case #	Brain bank	Clinical diagnosis	Age at death	Sex	Post mortem delay (days)	Braak & Braak AD stage	TREM2 variant	ApoE status	Thal phase Aβ	Modified CERAD	NIA classification
#1	Munich	Dementia, not specified	86	M	16-40	5	p.R62H	E3/E3	4	C	A3 B3 C3
#2	Munich	Dementia, not specified	81	F	n.i.	5	p.R62H	E3/E3	5	C	A3 B3 C3
#3	Munich	Dementia with rapid progression	75	M	24	6	p.R62H	E3/E4	5	C	A3 B3 C3
#4	Munich	Dementia Alzheimer type	78	F	21	6	p.R62H	E4/E4	5	C	A3 B3 C3
#5	Munich	Dementia frontotemporal	77	M	26	5	p.R62C	E3/E3	4	C	A3 B3 C3
#6	Munich	Dementia frontotemporal	78	M	5	5	p.D87N	E3/E4	5	C	A3 B3 C3
#7	UCL	Pick's Disease	71	M	40	6	p.D87N	E3/E4	5	C	A3 B3 C3
#8	UCL	Probable cortico-basal degeneration	64	M	36	6	p.R47H	E3/E4	5	C	A3 B3 C3
#9	UCL	AD	66	F	51	6	p.R47H	E4/E4	5	C	A3 B3 C3
#10	Munich	Dementia, Alzheimer type familial	62	F	132	6	None	E3/E4	5	C	A3 B3 C3
#11	Munich	Moderate dementia, probable Alzheimer type	82	M	15	6	None	E3/E4	5	C	A3 B3 C3
#12	Munich	Dementia Alzheimer type	93	F	n.i.	5	None	E4/E4	5	C	A3 B3 C3
#13	UCL	Young onset AD	64	F	76	6	None	E3/E3	5	C	A3 B3 C3
#14	UCL	AD (Logopenic Asphasia)	62	M	34	6	None	E3/E4	5	C	A3 B3 C3

Supplementary Table 2. Demographic and clinical characteristics of the control and TREM2 coding variant groups; n.i. – no information