



POLYCLONAL ANTIBODY

Catalog No. CB-TAUSB

Human Tau

Product type	Primary antibodies
Host	Sheep
Source	Serum
Form	Lyophilized powder Filtered lyophilized serum containing 0.02% thimerosal.
Volume (Concentration)	0.2 mL
Specificity	Human Tau
Antigen	A 20 amino acid peptide (EDHAGTYGLGDRKDQGGYTC), common to all forms of human Tau conjugated to diphtheria toxin.
Isotype	IgG

Application notes IHC(f), IHC(p), IF, WB, Light microscopy

Recommended use

Immunohistochemistry on frozen or wax embedded tissue. Antigen retrieval has been used in characterisation but may not be necessary. Please note that this is a very high titre antibody and dilutions lower than specified may result in higher backgrounds. We suspect that this antibody will produce excellent results at even higher dilutions.

Recommended dilutions

Light microscopy 1/4000 to 1/8000 depending on tissue and detection method;

Immunohistochemistry 1/8000

Immunofluorescence 1/400 to 1/800.

Western blotting: 1/2000 to 1/8,000 depending on detection system.

Optimal dilutions/concentrations should be determined by the end user.

Staining Pattern

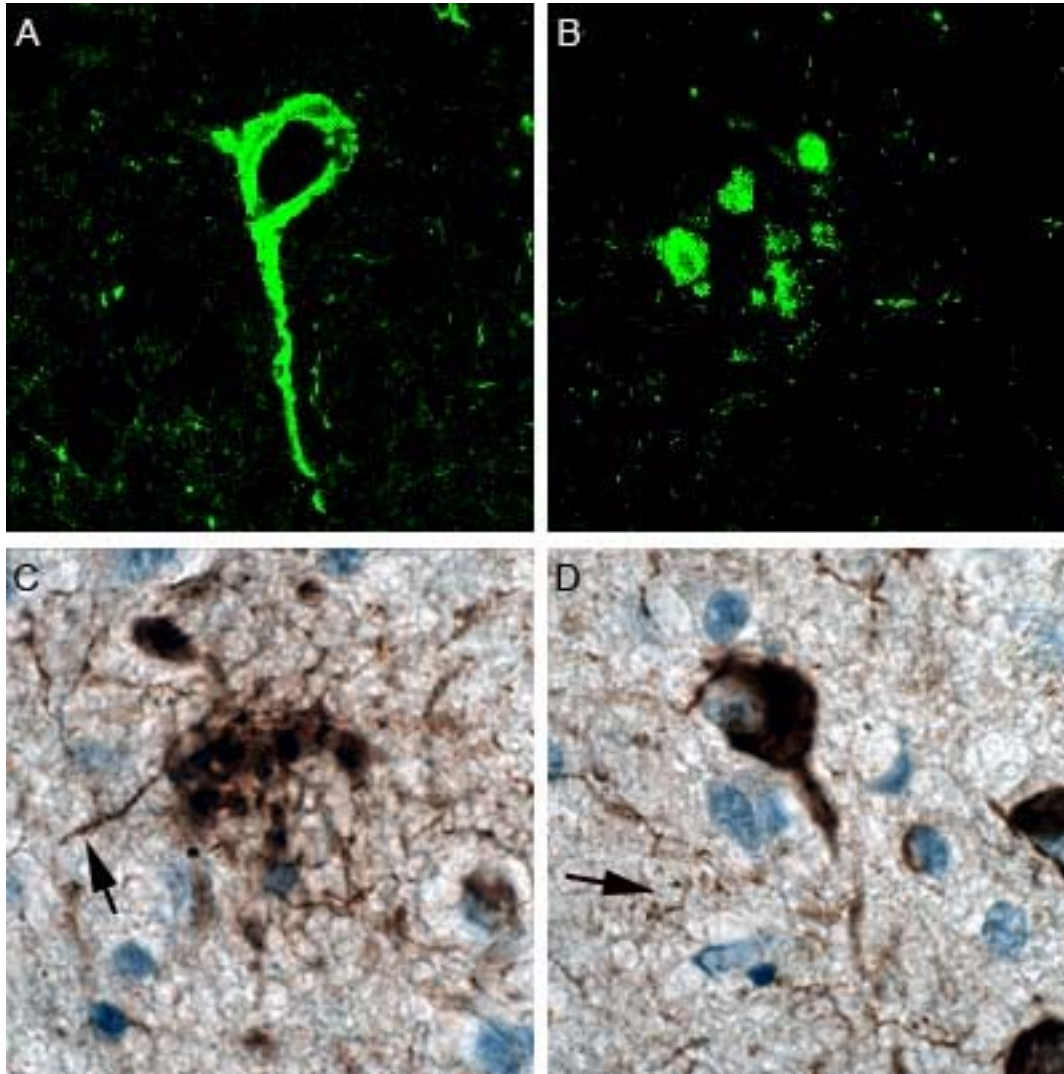
This antibody achieves excellent staining of Tau aggregations within neurons (tangles), and dystrophic neurons within plaques and also stains Tau threads within axons. (See attached images). Also detects multiple Tau isoforms on Western blotting (see attached blot of human control brain proteins).

Cross reactivity Human

Storage Reconstitute with 0.2ml of sterile distilled water. Re-aliquot into smaller volumes and freeze at -20°C or lower. Store working volume at 4°C. Avoid freeze thawing.

References

For research use only. Not for clinical diagnosis.



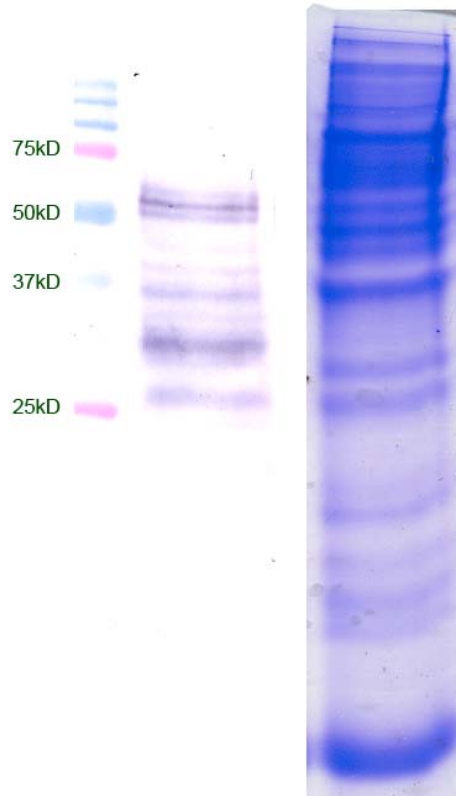
Immunohistochemistry using our TAUSA antibody showing excellent staining of Tau aggregations within neurons (A and D), dystrophic neurites within plaques (B and C) and within neuronal axons Tau threads (arrows) in (C and D). Panels A and B are confocal IHC images of TAUSA at 1/400 dilution with Jackson Cy2 secondary antibody (1/100). Panels C and D are light IHC using TAUSA (1/8000) with Jackson biotinylated donkey anti rabbit secondary antibody (1/2000) followed by Sigma Extra avidin peroxidase (1/400) and DAB substrate and a very light hematoxylin counter stain.



Tau Isoforms

Several isoforms of the Tau gene have been identified (NCBI; NP058519, NP005901, NP058518, NP058525). The transcripts range from 758 amino acids to 352 amino acids, but each transcript undergoes complex, regulated alternative splicing, giving rise to several mRNA species and hence several Tau proteins. MAPT transcripts are differentially expressed in the nervous system, depending on stage of neuronal maturation and neuron type.

This antibody was made to a peptide common to all forms of Tau and labels multiple bands on Western blotting of human brain proteins as expected.



Both TAUSA(Sheep) and TAURA (rabbit) show identical staining.

Western blot and stained gel of control human brain proteins. A heavy loading of 25ug of control brain homogenate was separated using 1D PAGE and one lane stained with Coomassie Blue, the remaining blot was transferred to PVDF and a strip probed with TAUSA at 1/2000, secondary antibody Sigma donkey anti -sheep -alkaline phosphatase (1/10,000) and developed with Sigma Fast BCIP/NBT substrate. Some very faint bands are visible between 75k 90kD with extended development but do not reproduce well.



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