



Qty: 50 µg/100 µl

Mouse anti- Tau [pT231]

Catalog No. 35-5200

Lot No.: See product label

Exp. Date: See product label

Mouse anti-Tau [pT231]

FORM

This monoclonal antibody is supplied as a 100 µl aliquot at a concentration of 0.5 mg/ml in PBS, pH 7.4, containing 0.1% sodium azide. This antibody is highly purified from mouse ascites by protein A chromatography.

CLONE: PHF-6

ISOTYPE: Mouse IgG₁

IMMUNOGEN

Paired helical filaments (PHF) tau preparation from human brain.

SPECIFICITY

This antibody reacts with human tau protein phosphorylated at threonine 231, fetal tau, and dephosphorylated neurofibrillary tangles. It is reactive with the Thr231 phosphorylated and diphosphorylated peptides.

Does not react with autopsy derived normal adult tau or with unphosphorylated or Ser235 phosphorylated protein.

REACTIVITY

Reactivity is confirmed with human fetal brain preparation and with biopsy derived, human paired helical filament preparation from brain.

Sample	ELISA	Western Blotting
Human	+++	+++
Mouse	ND	ND
Rat	ND	ND

(Excellent +++, Good++, Poor +, No reactivity 0, ND, Not Determined)

USAGE

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.1-1 µg/ml
Western Blotting: 1-3 µg/ml

STORAGE

Store at 2-8°C for up to one month. Store at -20°C for long-term storage. Avoid repeated freezing and thawing.

(cont'd)

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PI355200

(Rev 07/10) DCC-10-1859

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BACKGROUND

Alzheimer's disease (AD) is characterized by senile plaques, which are composed of extracellular deposits of A β peptide, and neurofibrillary (NF) tangles. The NF tangles are composed of intracellular filamentous aggregates of hyperphosphorylated tau proteins¹. NF tangles consist of microtubule-associated protein of paired helical filaments (PHF- τ) that are biochemically and structurally distinct from the amyloid fibrils in senile plaques².

Clone PHF-6 recognizes phosphorylation dependent epitopes of Thr-231 on PHF- τ as well as fetal tau, but does not recognize autopsy-derived normal adult tau². Phosphoamino Thr-231 is one of the two major immunodominant residues of PHF- τ . The antigen recognition pattern of PHF-6 is completely identical to that of monoclonal AT180 (widely used clone). PHF-6 does not recognize unphosphorylated or Ser235 phosphorylated 224-240 peptide, and it recognizes the Thr231 phosphorylated and diphosphorylated peptides equally well.

REFERENCES

1. Lewis J et al. *Science* 293:1487-1491, 2001
2. Hoffmann R et al. *Biochemistry* 36:8114-8124, 1997

RELATED PRODUCTS

Product	Clone/PAD*	Cat. No.
Mouse anti-Amyloid β -Peptide	AMY-33	13-0100
Rabbit anti-Amyloid β -Peptide	Polyclonal	71-5800
Rabbit anti- β -APP	CT695	51-2700
Rabbit anti- β -APP 695	LN27	13-0200
Rabbit anti-Presenilin-1	ZMD.97	34-4600
Rabbit anti-Presenilin-2 – Loop	ZMD.84	34-4400
Rabbit anti-Presenilin-2	ZMD.96	34-4500
Rabbit anti-Synapsin	Polyclonal	51-5200
Mouse anti- α -synuclein	LB509	18-0215
Mouse anti- α/β -synuclein	Syn.202	32-8200
Mouse anti-Tau (CT)	T46	13-6400
Mouse anti-Tau	T14	13-1400

Protein A	Sepharose [®] 4B	10-1041
rec-Protein G	Sepharose [®] 4B	10-1241

*PAD: Polyclonal Antibody Designation

Conjugate	ZyMAX[™] Goat x Rabbit IgG (H+L)	ZyMAX[™] Goat x Mouse IgG (H+L)
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy [™] 3	81-6115	81-6515
Cy [™] 5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		In vitro diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

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