

ABfinity™ Tau [pT181] Recombinant Monoclonal Antibody

Store at 2°C to 8°C (short-term), or -20°C (long-term)

Catalog Number: 701530

Pub. No. MAN0010203 Rev. 1.00

Clonality: Monoclonal	Quantity: 100 µg	Volume: 200 µL	Concentration: 0.5 mg/mL
Host/Class: Rabbit IgG	Reactivity: Human Tau [pT181]	Reactive Species: Human	

Product description

Tau protein plays a very important role in nucleation and stabilization of microtubules by associating with tubulin subunits. In humans, Tau is predominantly expressed in the brain, and aberrant misfolding and hyperphosphorylation results in self-assembly into tangles. Six isoforms of Tau with varying degree of affinity to tubulin exist, wherein the C-terminus of Tau (positively charged) associates with microtubules (negatively charged). Numerous serine/threonine kinases; including GSK-3β, protein kinase A (PKA), cyclin-dependent kinase 5 (cdk5), and casein kinase II (CK2), phosphorylate Tau. The MAPT (microtubule associated protein Tau) gene encoding Tau protein contains 16 exons, and is located on chromosome 17q21.

Product specifications

Predicted Reactivity:	Monkey, Feline, Bovine, Mouse
Alternate Names:	TAU, PPNB, DDPAC, FTDP-17, MAPTL, MTBT1, MTBT2, MSTD
Gene ID:	4137, 17762
Protein Accession No.:	P10636
Sequence Identity:	Human
Sequence Homology:	Human, Mouse
Clone/PAD:	5H9L11
Isotype:	IgG
Lot:	See product label

Product applications

The antibody has been used in western blotting and ELISA applications. Other applications may work but have not been tested.

Because conditions may vary, it is recommended that each investigator determine the optimal amount of antibody to be used for each application.

Storage and handling

Store the antibody at 2°C to 8°C for up to 1 month, or -20°C for long-term storage. Avoid repeated freezing and thawing.

Stability

When stored as instructed, expires one year from date of receipt unless otherwise indicated on product label.

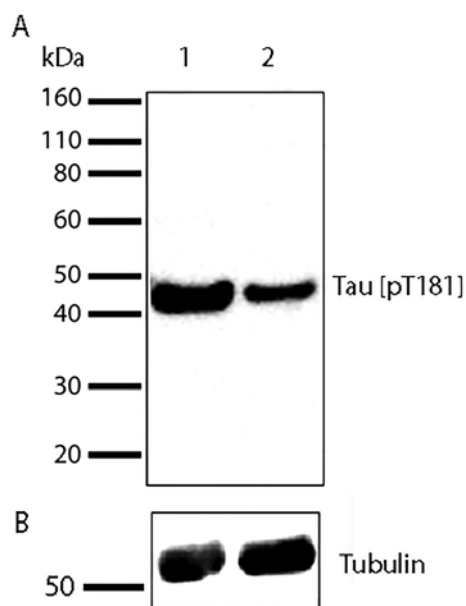


Figure 1 Western blot analysis of ABfinity™ Tau [pT181] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701530).

Western blot analysis was performed on 30 µg each of rat brain (Lane 1) or mouse brain (Lane 2) whole cell lysates.

Endogenous Tau [pT181] was detected at ~46 kDa using ABfinity™ Tau [pT181] Recombinant Rabbit Monoclonal Antibody at a concentration of 1 µg/mL.

A rabbit anti-tubulin antibody was blotted as a loading control. The blots were developed using chemiluminescence (ECL) method with a goat anti-rabbit HRP secondary antibody (Cat no. G21234).

Storage buffer

Phosphate buffered saline (PBS) with 0.09% sodium azide.



CAUTION! Sodium azide is extremely toxic and may react with lead and copper plumbing to form highly explosive metal azides. Properly dispose of solutions containing sodium azide. Read the Safety Data Sheet (SDS) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves. SDSs are available at www.lifetechnologies.com/support.

Product documentation

To obtain a Certificate of Analysis or Safety Data Sheets (SDSs), visit www.lifetechnologies.com/support.

Related products

Product Name	Quantity	Cat. No.
WesternBreeze® Chromogenic Kit Anti-Rabbit	1 kit	WB7105
WesternBreeze® Chemiluminescent Kit Anti-Rabbit	1 mg	WB7106
Goat anti-mouse (H+L), HRP conj.	1 mg	G21040
Goat anti-rabbit (H+L), HRP conj.	1 mg	G21234
Goat anti-mouse (H+L), AP conj.	1 mg	G21060
Goat anti-rabbit (H+L), AP conj.	1 mg	G21079
Streptavidin Agarose	5 mL	SA10004

Important licensing information

This product may be covered by one or more Limited Use Label Licenses. By use of this product, you accept the terms and conditions of all applicable Limited Use Label Licenses.

Limited product warranty

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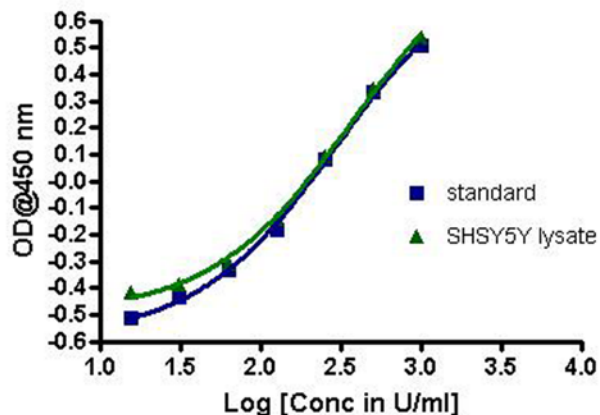


Figure 2 Sandwich ELISA analysis of ABfinity™ Tau [pT181] Recombinant Rabbit Monoclonal Antibody (Cat. no. 701530).

Sandwich ELISA analysis was performed using anti-Tau capture antibody coated onto the plate. A seven point curve was plotted with standard concentrations ranging from 15–1000 U/mL, or SH-SY5Y cell lysates with protein concentrations ranging from 0.1–8 mg/mL. The ABfinity™ Tau [pT181] Recombinant Rabbit Monoclonal Antibody was used as a detector at a concentration of 0.5 µg/mL. A non-linear regression analysis (4PL) was performed for plotting the curve.

Explanation of symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer		Catalog number		Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

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