

Anti-Tau (Ser416) Antibody

Our Anti-Tau (Ser416) rabbit polyclonal phosphospecific primary antibody from PhosphoSolutions is pr
Catalog # AN1575

Specification

Anti-Tau (Ser416) Antibody - Product Information

Application	WB
Primary Accession	P19332
Reactivity	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	78564

Anti-Tau (Ser416) Antibody - Additional Information**Other Names**

AI413597 antibody, AW045860 antibody, DDPAC antibody, FLJ31424 antibody, FTDP 17 antibody, G protein beta1/gamma2 subunit interacting factor 1 antibody, MAPT antibody, MAPTL antibody, MGC134287 antibody, MGC138549 antibody, MGC156663 antibody, Microtubule associated protein tau antibody, Microtubule associated protein tau isoform 4 antibody, Microtubule-associated protein tau antibody, MSTD antibody, Mtapt antibody, MTBT1 antibody, MTBT2 antibody, Neurofibrillary tangle protein antibody, Paired helical filament tau antibody, Paired helical filament-tau antibody, PHF tau antibody, PHF-tau antibody, PPND antibody, PPP1R103 antibody, Protein phosphatase 1 regulatory subunit 103 antibody, pTau antibody, RNPTAU antibody, TAU antibody, TAU_HUMAN antibody, Tauopathy and respiratory failure included antibody

Target/Specificity

Tau is a key microtubule-associated protein that plays an important role in the formation of microtubules in axons (Binder et al. 1985). Six tau isoforms have been identified as products of a single gene produced by alternative mRNA splicing (Goedert 1990). Tau mutations have been implicated in many neurodegenerative disorders such as Alzheimer's disease (AD), Pick's disease and progressive supranuclear palsy. It has been well documented that hyperphosphorylated tau is a major component of paired helical filaments in AD brain (Lee 1995). Ser-416 has been demonstrated to be a major phosphorylation site in vitro by CaM kinase II (Steiner et al. 1990).

Dilution

WB~~1:1000

Format

Antigen Affinity Purified from Pooled Serum

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Anti-Tau (Ser416) Antibody is for research use only and not for use in diagnostic or therapeutic

procedures.

Shipping
Blue Ice

Anti-Tau (Ser416) Antibody - Protocols

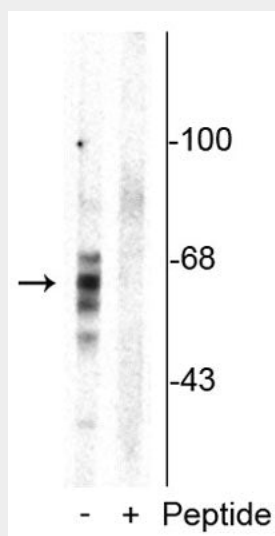
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

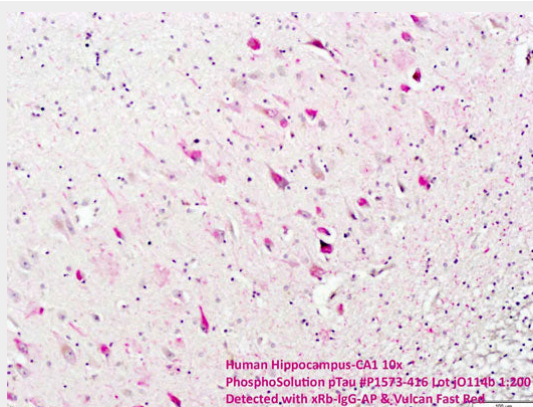
- [Flow Cytometry](#)

- [Cell Culture](#)

Anti-Tau (Ser416) Antibody - Images



Western blot of rat brain homogenate showing specific immunolabeling of the ~59 kDa, ~65 kDa, ~68 kDa Tau isoforms phosphorylated at Ser416 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is blocked by preadsorption with the phosphopeptide used as antigen, but not by the corresponding non-phosphopeptide (not shown).



Immunostaining of FFPE human hippocampus-CA1 neurons labeling tau phosphorylated at Ser 416 (cat. p1573-416, 1:200, red). The bright red stain labels the phosphorylated neurons while the thin, thread like stain labels the dystrophic neurites identifying the characteristic lesions of Alzheimer diseased tissue. Photo courtesy of Benecia Hong-Goka, Indiana Univ. SOM)

Anti-Tau (Ser416) Antibody - Background

Tau is a key microtubule-associated protein that plays an important role in the formation of microtubules in axons (Binder et al. 1985). Six tau isoforms have been identified as products of a single gene produced by alternative mRNA splicing (Goedert 1990). Tau mutations have been implicated in many neurodegenerative disorders such as Alzheimer's disease (AD), Pick's disease and progressive supranuclear palsy. It has been well documented that hyperphosphorylated tau is a major component of paired helical filaments in AD brain (Lee 1995). Ser-416 has been demonstrated to be a major phosphorylation site in vitro by CaM kinase II (Steiner et al. 1990).