

Phospho Ser416 Tau Antibody

Affinity purified rabbit polyclonal antibody Catalog # AN1156

Specification

Phospho Ser416 Tau Antibody - Product Information

Application WB
Primary Accession P19332
Reactivity Rat

Predicted Bovine, Human, Mouse, Monkey

Host Rabbit
Clonality polyclonal
Calculated MW 59/65/68 KDa

Phospho Ser416 Tau Antibody - Additional Information

Gene ID 69329
Gene Name MAPT

Other Names

Microtubule-associated protein tau, Neurofibrillary tangle protein, Paired helical filament-tau, PHF-tau, Mapt, Mtapt, Tau

Target/Specificity

Synthetic phospho-peptide corresponding to amino acid residues surrounding Ser416 conjugated to KLH.

Dilution

WB~~ 1:1000

Format

Prepared from rabbit serum by affinity purification via sequential chromatography on phosphoand dephospho-peptide affinity columns.

Antibody Specificity

Specific for ~59, 65, 68k tau protein phosphorylated at Ser416.

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

Phospho Ser416 Tau Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping

Blue Ice

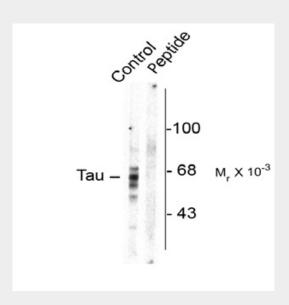
Phospho Ser416 Tau Antibody - Protocols



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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Phospho Ser416 Tau Antibody - Images



Western blot of rat brain homogenate showing specific immunolabeling of the~59, 65, 68k Tau isoforms phosphorylated at Ser416(control). Immunolabeling isblocked by preadsorption with the phospho-peptide used as antigen (Peptide)but not by the corresponding dephospho-peptide (not shown).

Phospho Ser416 Tau 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). Serine 416 has been demonstrated to be a major phosphorylation site in vitro by CaM kinase II (Steiner at al. 1990).

Phospho Ser416 Tau Antibody - References

Binder LI, Frankfurter A, Rebhun LI (1985) The distribution of tau in the mammalian central nervous system. J Cell Bio Oct; 101(4):1371-8.

Lee V.M.Y. (1995) Disruption of the cytoskeleton in Alzheimer's disease. Curr. Opin. Neurobiol. 5, 663-668.

Goedert M. and Jakes R. (1990) Expression of separate isoforms of human tau protein: correlation with the tau pattern in brain and effects on tubulin polymerization. EMBO J 9, 4225-4230.

Steiner B., Mandelkow E.M., Biernat J. et al. (1990) Phosphorylation of microtubuleassociated





protein tau: identification of the site for Ca2+-calmodulin dependent kinase and relationship with tau phosphorylation in Alzheimer tangles. EMBO J. 9, 3539-3544.