

Datasheet for 612-401-E42**Tau phospho S416 Antibody****Overview**

Description:	Anti-TAU pS416 (RABBIT) Antibody - 612-401-E42
Item No.:	612-401-E42
Size:	100 µL
Applications:	IHC, WB
Reactivity:	Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	Tau pS416 Antibody detects Tau, which is a key microtubule-associated protein that plays an important role in the formation of microtubules in axons. Six tau isoforms have been identified as products of a single gene produced by alternative mRNA splicing. 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. Serine 416 has been demonstrated to be a major phosphorylation site in vitro by CaM kinase II. Anti-Tau pS416 Antibody is ideal for investigators involved in Cell Signaling, Neuroscience, Signal Transduction research.
Synonyms:	Microtubule-associated protein tau, Neurofibrillary tangle protein, Paired helical filament-tau, PHF-tau
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	Mapt
Reactivity:	Mouse, Rat
PTM Specificity:	Phosphorylation
Immunogen Type:	Conjugated Peptide

Immunogen:	Anti-Tau pS416 Antibody was produced in rabbit by repeated immunizations with synthetic phospho-peptide corresponding to amino acid residues surrounding Ser416 of the Tau protein.
Purity/Specificity:	Anti-Tau pS416 antibody is directed against rat Tau. Tau pS416 antibodies was prepared from monospecific antiserum by immunoaffinity chromatography using phospho peptide coupled to agarose beads followed by solid phase adsorption(s) against non-phospho peptide and non-specific peptide to remove any unwanted reactivities. Assay by immunoelectrophoresis resulted in a single precipitin arc against anti-Rabbit Serum. This antibody is directed against tau protein phosphorylated at Ser416. Reactivity is expected from the following species based on 100% sequence homology: bovine, canine, human, mouse and non-human primates.
Relevant Links:	• UniProtKB - P19332 • GeneID - 69329 • UniProtKB - P19332.3

Application Details

Tested Applications:	IHC, WB
Application Note:	Anti-Tau pS416 (Rabbit) antibody is tested for use in Western Blot and IHC. Expect bands approximately 59, 65, 68 kDa in size corresponding to tau proteins phosphorylated at Ser416 in the appropriate cell lysate or extract. Researchers should determine optimal titers for applications that are not stated below.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
WB:	1:1000

Formulation

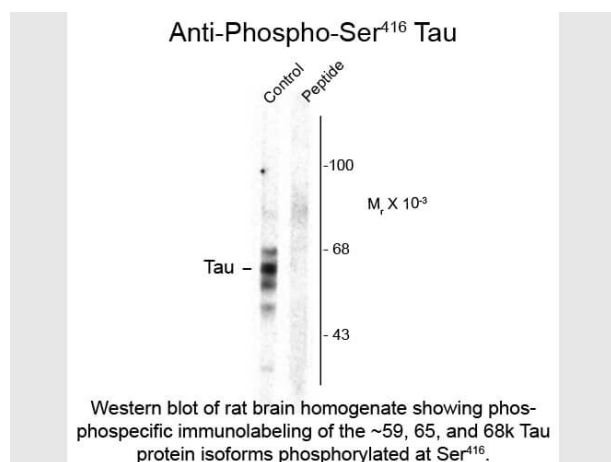
Physical State:	Liquid
Buffer:	0.01 M HEPES, 0.15 M Sodium Chloride, pH 7.5
Stabilizer:	0.1 mg/ml Bovine Serum Albumin (BSA) - IgG and Protease free, 50% (v/v) Glycerol

Shipping & Handling

Shipping Condition:	Dry Ice
Storage Condition:	Store vial at -20° C prior to opening. This product is stable at 4° C as an undiluted liquid. For extended storage, aliquot contents and freeze at -20° C or below. Avoid cycles of freezing and thawing. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images



Western Blot

Western Blot of Rabbit anti-Tau pS416 antibody. Lane 1: rat brain homogenate (control). Lane 2: Peptide. Load: 10 µg per lane. Primary antibody: Tau pS416 antibody at 1:1,000 for overnight at 4°C. Secondary antibody: IRDye800™ rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 59, 65, and 68 kDa for Tau pS416. Other band(s): Tau pS416 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.