

Datasheet for ABIN6700659

MAPT Protein (Pro301Ser-Mutant)[Go to Product page](#)**1** Publication

Overview

Quantity:	20 µg
Target:	MAPT
Protein Characteristics:	Pro301Ser-Mutant
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Application:	Western Blotting (WB)

Product Details

Purpose:	Tau-441 (P301S) recombinant protein
Purification:	Recombinant human tag-free Tau-441 (P301S) was expressed in E. coli cells. The purity was determined to be >90% by densitometry.
Purity:	>90%

Target Details

Target:	MAPT
Alternative Name:	MAPT (MAPT Products)
Background:	Synonyms: Tau-F, (N2R4), Tau-4, MAPT, MSTD, PPND, DDPAC, MAPTL, MTBT1, MTBT2, FTDP-17, FLJ31424, MGC138549, Microtubule-associated protein tau Background: Tau-441 or Tau-F is a member of the Tau family of proteins which function to stabilize the microtubules by binding to them. Tau proteins are subject to phosphorylation and

Target Details

this phenomenon regulates the association of the Tau protein with the microtubules (1). Deposits of Alzheimer's disease AD-associated proteins, such as hyperphosphorylated Tau, as well as other shared misfolded proteins, such as, β -amyloid precursor protein (β APP), ubiquitin, and various chaperones and protein kinases are thought to play a pathologic role in the cognitive decline and muscular failure. Malfunctioning of Tau proteins is associated with microtubules disintegration and collapsing of the neuronal transport system (2). Tau-441 Protein is ideal for investigators involved in Signaling Proteins, Tau Proteins, Invasion/Metastasis, Neurobiology, and p38 Pathway research.

UniProt: [P10636-8](#)

Pathways: [MAPK Signaling](#), [Microtubule Dynamics](#), [M Phase](#), [Regulation of Cell Size](#)

Application Details

Application Notes: Western_Blot_Dilution: User Optimized
Other: Kinase Assay-User Optimized
Application_Note: Tau-441 Protein is suitable for use in Western Blot and Kinase Assay. Expect a band approximately ~63 kDa on specific lysates or tissues. Specific conditions for reactivity should be optimized by the end user.

Comment: EM

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 0.2 μ g/ μ L

Buffer: Tau-441 Protein is stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 0.25 mM DTT, 0.1 mM PMSF, 25 % glycerol.

Storage: -80 °C

Storage Comment: Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

Expiry Date: 12 months

Publications

Product cited in: Flach, Leu, Martinisi, Skachokova, Frank, Tolnay, Stahlberg, Winkler: "Trans-seeding of Alzheimer-related tau protein by a yeast prion." in: **Alzheimer's & dementia : the journal of the Alzheimer's Association**, Vol. 18, Issue 12, pp. 2481-2492, (2023) ([PubMed](#)).