

Synonym

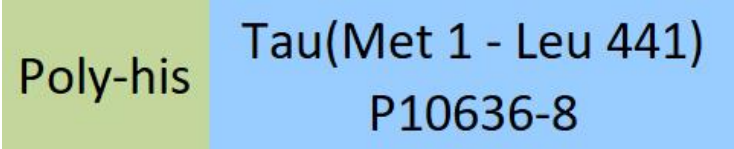
DDPAC,FTDP-17,MAPT,MSTD,MTBT1,Tau,PHF-tau,TAU

Source

Human Tau-441 GSK-3beta-phosphorylated protein, His Tag(TAU-H5147) is expressed from E. coli cells. It contains AA Met 1 - Leu 441 (Accession # [P10636-8](#)).

Predicted N-terminus: Met

Molecular Characterization



This protein carries a polyhistidine tag at the N-terminus.

The protein has a calculated MW of 47.9 kDa. The protein migrates as 45-65 kDa when calibrated against [Star Ribbon Pre-stained Protein Marker](#) under reducing (R) condition (SDS-PAGE).

Purity

>90% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 µm filtered solution in 50 mM Tris, 150 mM NaCl, pH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

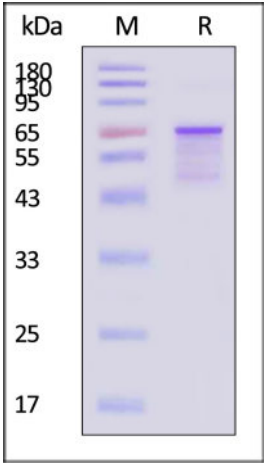
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 12 months under sterile conditions.

SDS-PAGE



Human Tau-441 GSK-3beta-phosphorylated protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With [Star Ribbon Pre-stained Protein Marker](#)).

Mass Spectrometry

Accession	MW [kDa]	Modifications	Position	Abundances
P10636-8	78.9	phospho	T30	
P10636-8	78.9	phospho	T69	1646436
P10636-8	78.9	phospho	T181	3306908
P10636-8	78.9	phospho	T212	6375377
P10636-8	78.9	phospho	S289	1223443
P10636-8	78.9	phospho	S305	3141761
P10636-8	78.9	phospho	S396	31326272
P10636-8	78.9	phospho	S413	1333573



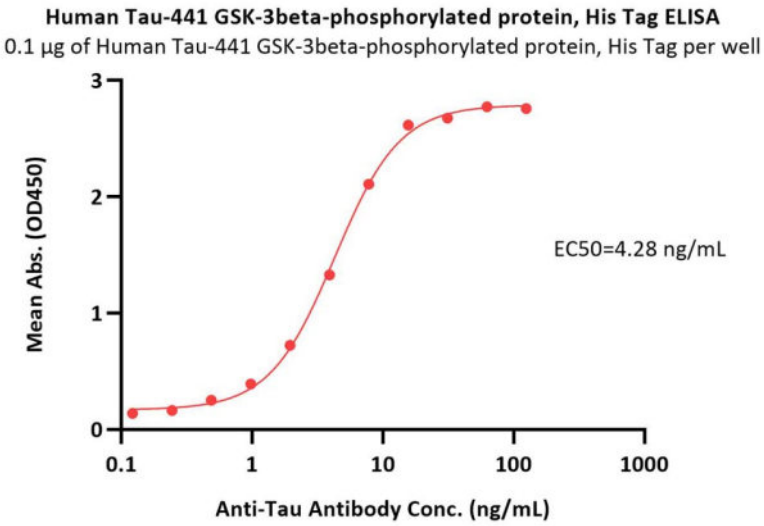
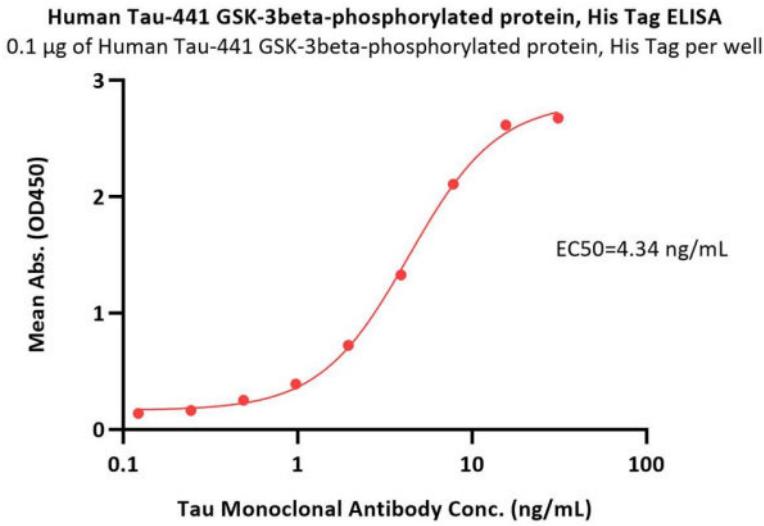
Human Tau-441 GSK-3beta-phosphorylated protein, His Tag

Catalog # TAU-H5147



Mass spectrometry reveals 8 phosphorylation sites on E.coli expressed Human Tau-441 GSK-3beta-phosphorylated protein, His Tag (Cat. No. TAU-H5147) as shown on the modified phosphorylation PTM spectrum. The protein sequence coverage was 40% (Routinely tested).

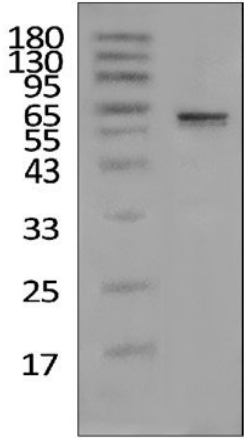
Bioactivity-ELISA



Immobilized Human Tau-441 GSK-3beta-phosphorylated protein, His Tag (Cat. No. TAU-H5147) at 1 µg/mL (100 µL/well) can bind Anti-Phospho-Tau (Thr181) Monoclonal Antibody, Mouse IgG with a linear range of 1-31 ng/mL (QC tested).

Immobilized Human Tau-441 GSK-3beta-phosphorylated protein, His Tag (Cat. No. TAU-H5147) at 1 µg/mL (100 µL/well) can bind Anti-Tau Antibody with a linear range of 0.1-8 ng/mL (Routinely tested).

Western Blot



Western blot was performed by loading Human Tau-441 GSK-3beta-phosphorylated protein, His Tag (Cat. No. TAU-H5147): 400ng, and it was electrophoresed using NuPAGE™ 12% Bis-Tris Protein Gel. Human Tau 441 GSK-3beta-phosphorylated protein, His Tag (Cat. No. TAU-H5147) were transferred onto a pvdf membrane by Tanon Trans-Blot. Anti-Phospho-Tau (Thr181) Monoclonal Antibody is primary antibody (1 µg/mL) and (MFC) Peroxidase Affini Pure Goat Anti-Mouse IgG, Fcγ Fragment Specific (minXHu, Bov, HrSrProt (1:1500)) is second antibody detected by chemiluminescence with using the iBright 1500 (Chemiluminescent detection was performed using BeyoECL Plus).

Background



Human Tau-441 GSK-3beta-phosphorylated protein, His Tag

Catalog # TAU-H5147



This gene encodes the microtubule-associated protein tau (MAPT) whose transcript undergoes complex, regulated alternative splicing, giving rise to several mRNA species. MAPT transcripts are differentially expressed in the nervous system, depending on stage of neuronal maturation and neuron type. MAPT gene mutations have been associated with several neurodegenerative disorders such as Alzheimer's disease, Pick's disease, frontotemporal dementia, cortico-basal degeneration and progressive supranuclear palsy. [provided by RefSeq, Jul 2008]

