Human Tau-441 / 2N4R Protein, Tag Free (MALS verified)

Catalog # TAU-H5117

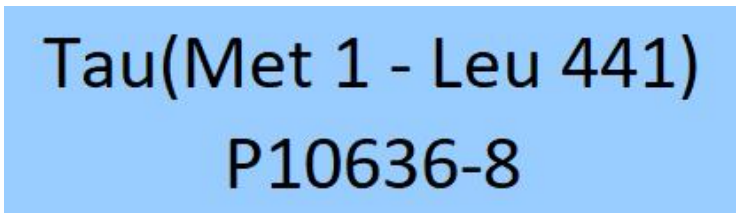
Synonym

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

Source

Human Tau-441, Tag Free(TAU-H5117) is expressed from E. coli cells. It contains AA Met 1 - Leu 441 (Accession # P10636-8).
Predicted N-terminus: Met 1

Molecular Characterization



This protein carries no "tag".

The protein has a calculated MW of 45.8 kDa. The protein migrates as 30-53 kDa and 55-65 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE).

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Sterility

Negative

Purity

>90% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

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

Contact us for customized product form or formulation.

Shipping

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

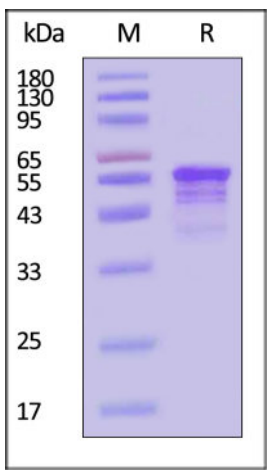
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

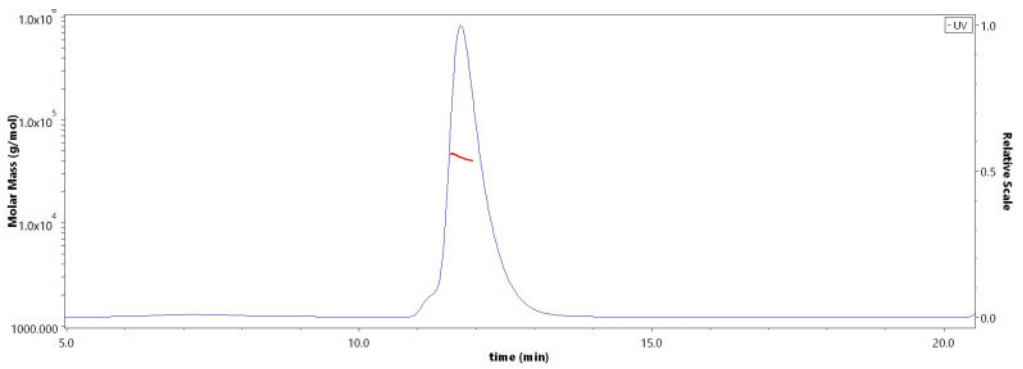
- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

SDS-PAGE



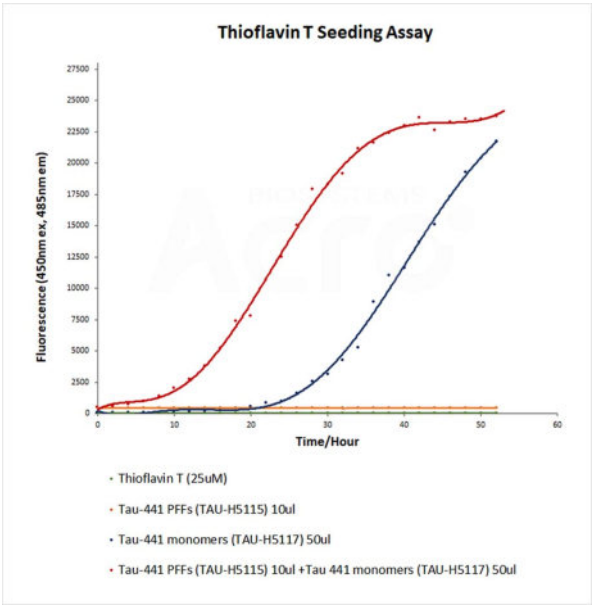
Human Tau-441, Tag Free on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS



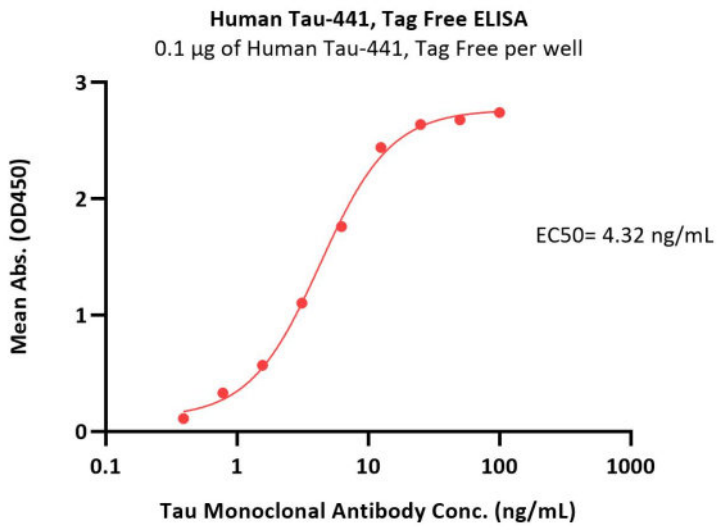
The purity of Human Tau-441, Tag Free (Cat. No. TAU-H5117) is more than 90% and the molecular weight of this protein is around 38-55 kDa verified by SEC-MALS.
Report

Bioactivity-ThT Assay



Thioflavin T emission curves show increased fluorescence (correlated to tau aggregation) over time when tau wild-type monomers (Cat. No. TAU-H5117) are combined with tau wild-type Pre-formed Fibrils (Cat. No. TAU-H5115) (Routinely tested).

Bioactivity-ELISA



Immobilized Human Tau-441, Tag Free (Cat. No. TAU-H5117) at 1 μg/mL (100 μL/well) can bind Tau Monoclonal Antibody with a linear range of 0.4-6 ng/mL (QC tested).

Background

Tau is a microtubule-associated protein, which encodes by the MAPT gene that located on chromosome 17q21. Tau Promotes microtubule assembly and stability, and might be involved in the establishment and maintenance of neuronal polarity. Hyperphosphorylation of the tau protein (tau inclusions, pTau) can result in the self-assembly of tangles of paired helical filaments and straight filaments, which are involved in the pathogenesis of Alzheimer's disease, frontotemporal dementia, and other tauopathies.

Clinical and Translational Updates