

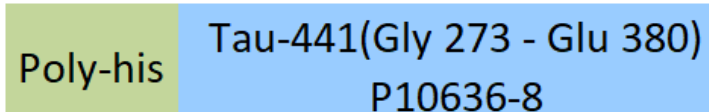
**Synonym**

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

**Source**

Human Tau-441 (273-380), His Tag (TAU-H51H5) is expressed from E.coli cells. It contains AA Gly 273 - Glu 380 (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 13.5 kDa. The protein migrates as 16 kDa under reducing (R) condition (SDS-PAGE).

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

**Formulation**

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 150 mM NaCl, 1 mM TCEP, 1 mM EDTA, pH7.5 . Normally trehalose is added as protectant before lyophilization.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

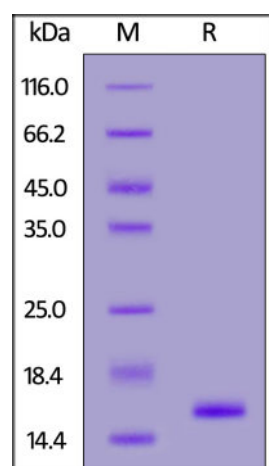
**Storage**

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

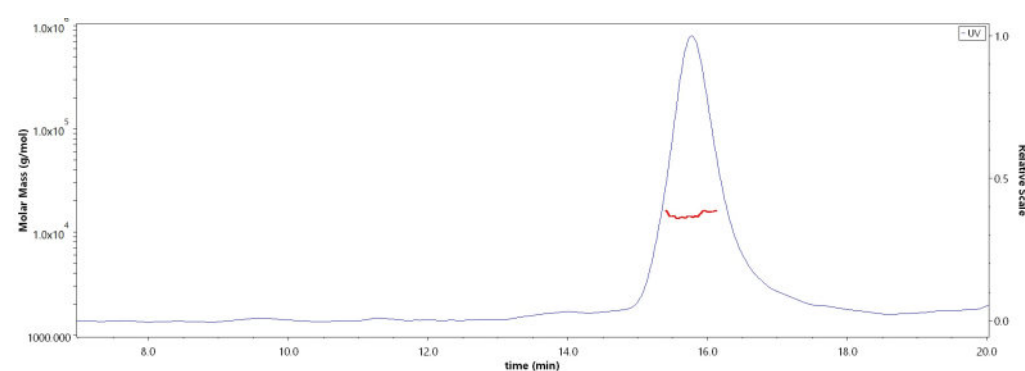
*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

Human Tau-441 (273-380), His Tag on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

**SEC-MALS**

The purity of Human Tau-441 (273-380), His Tag (Cat. No. TAU-H51H5) is more than 90% and the molecular weight of this protein is around 12-18 kDa verified by SEC-MALS.

[Report](#)

**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. Tau-441 is known as "2N4R," "Isoform Tau-F," "Tau-4" or "Tau 441", which consisting of 441 amino acid. Tau-441 is a potential therapeutic target for pathogenesis.

### **Clinical and Translational Updates**

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.