

Synonym

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

Source

Human Tau-441 K18 Pre-formed Fibrils Protein, His Tag(TAU-H5146) is expressed from E. coli cells. It contains AA Gln 244 - Glu 372 (Accession # P10636-8).

Predicted N-terminus: Met

Molecular Characterization

Tau(Gln 244 - Glu 372) P10636-8

Poly-his

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

The protein has a calculated MW of 13.8 kDa.

Endotoxin

Less than $0.05\ EU$ per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 µm filtered solution in PBS, pH7.4.

Contact us for customized product form or formulation.

Shipping

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

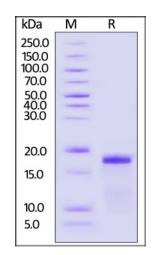
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product should be stored at -70°C or room temperature for short storage. Do not store fibrils on ice or at 4°C;
- The unsonicated fibril is validated to be stable after storage at -70°C for 1 year under sterile conditions;
- The sonicated fibril should be stored at -70°C for not more than 8 weeks.

SDS-PAGE

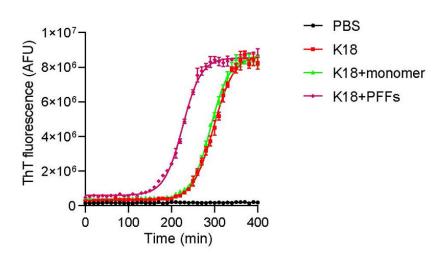


Tau-441 K18 monomer on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

Bioactivity-ThT Assay

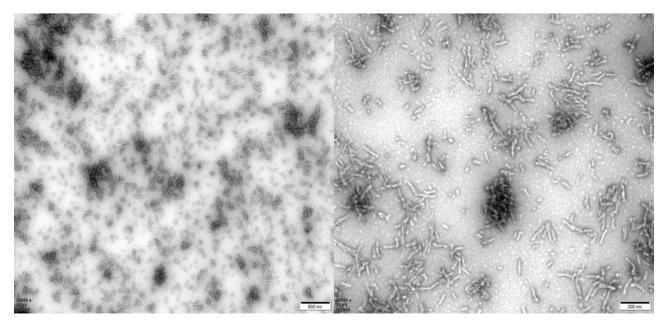






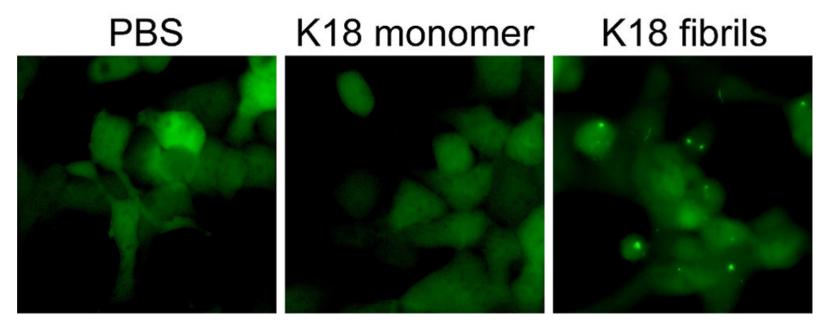
Thioflavin T emission curves show increased fluorescence (correlated to tau aggregation) over time when tau K18 monomers are combined with Human Tau-441 K18 Pre-formed Fibrils Protein, His Tag (Cat. No. TAU-H5146) (Routinely tested).

Electron Microscope



Transmission electron microscopy (TEM) of Human Tau-441 K18 Pre-formed Fibrils Protein, His Tag (Routinely tested).

Bioactivity-Bioactivity CELL BASE



HEK293/Human Tau (GFP) Stable Cell Line (Cat. No. CHEK-ATP087) were transduced with Human Tau-441 K18 Pre-formed Fibrils Protein, His Tag (Cat. No. TAU-H5146) and Human Tau-441 K18 Protein, His Tag respectively. The fluorescence of GFP-Tau (Green) was detected by confocal microscope. A. Lipo2000 transduction. B. Lipo2000 and Human Tau-441 K18 Protein, His Tag transduction. C. Lipo2000 and Human Tau-441 K18 Pre-formed Fibrils Protein, His Tag transduction (Routinely tested).



Human Tau-441 K18 Pre-formed Fibrils Protein, His Tag

Catalog # TAU-H5146



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

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

