

#### **Synonym**

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

#### **Source**

Human Tau-441 Pre-formed Fibrils, Tag Free(TAU-H5115) is expressed from E. coli cells. It contains AA Met 1 - Leu 441 (Accession # <u>P10636-8</u>).

Predicted N-terminus: Met 1

#### **Molecular Characterization**

# Tau(Met 1 - Leu 441) P10636-8

This protein carries no "tag".

The protein has a calculated MW of 45.8 kDa.

#### **Endotoxin**

Less than 1.0 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.

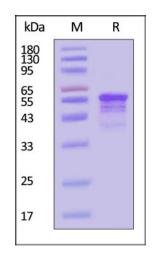
#### **Storage**

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 / 2N4R Pre-formed Fibrils 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% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

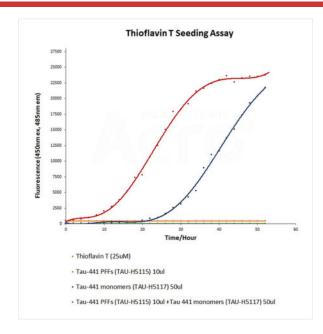
**Bioactivity-ThT Assay** 



# Human Tau-441 / 2N4R Pre-formed Fibrils Protein, Tag Free

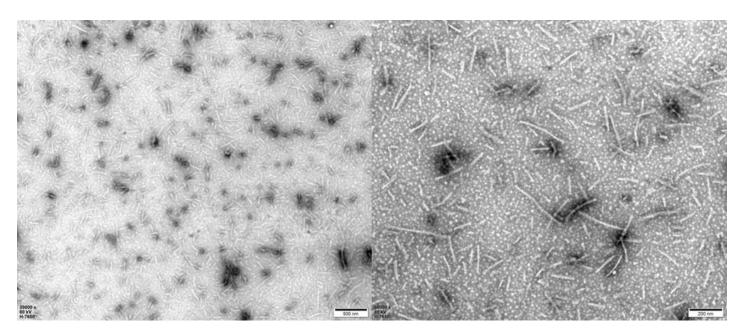
Catalog # TAU-H5115





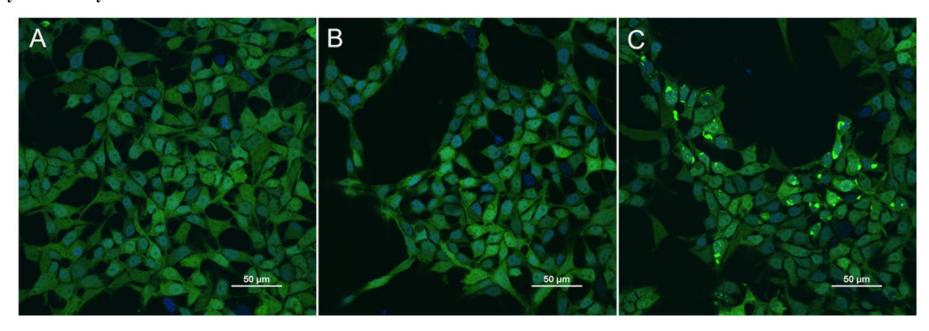
Thioflavin T emission curves show increased fluorescence (correlated to tau aggregation) over time when tau wild-type monomers (Cat. No. TAU-H5117) are combined with tau wild-type Pre-formed Fibrils (Cat. No. TAU-H5115) (Routinely tested).

### **Electron Microscope**



Transmission electron microscopy (TEM) of Tau-441 preformed fibrils (Cat. No. TAU-H5115). Fibril structure is visible on negative stain TEM images of TAU-H5115 (Routinely tested).

# **Bioactivity-Bioactivity CELL BASE**



HEK293/Human Tau (GFP) Stable Cell Line (Cat. No. CHEK-ATP087) were transduced with Human Tau-441 Pre-formed Fibrils, Tag Free (Cat. No. TAU-H5115) and Human Tau-441, Tag Free (Cat. No. TAU-H5117) respectively. The fluorescence of GFP-Tau (Green) and DAPI (Blue) were detected by confocal microscope.



# Human Tau-441 / 2N4R Pre-formed Fibrils Protein, Tag Free





A. Lipo2000 transduction. B. Lipo2000 and Human Tau-441, Tag Free transduction. C. Lipo2000 and Human Tau-441 Pre-formed Fibrils, Tag Free transduction. Scale bars, 50 μm (Routinely 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** 

