

Human Tau-441/2N4R Pre-formed Fibrils Protein



Cat. No. TAU-HE01F

Description	
Source	Recombinant Human Tau-441/2N4R Pre-formed Fibrils Protein is expressed from E.coli without tag. It contains Met1-Leu441.
Accession	P10636-8
Molecular Weight	The Tau-441/2N4R monomer protein has a predicted MW of 45.84 kDa.
Endotoxin	Less than 0.1 EU per µg by the LAL method.

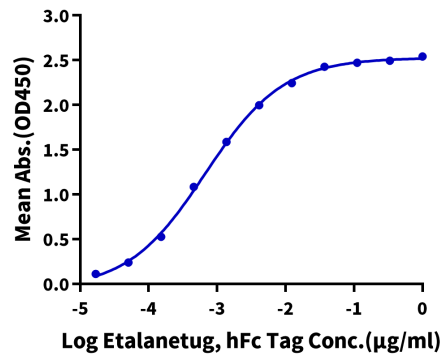
Formulation and Storage	
Formulation	Supplied as 0.22 µm filtered solution in 25 mM HEPES, 250 mM NaCl,10% Glycerol, 1 mM TCEP (pH 7.2).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Do not store Pre-formed Fibrils at 4°C. Recommend to aliquot the Pre-formed Fibrils protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

Usage	Recommended Usage Guidelines for Pre-formed Fibrils • Thawing: Thaw Pre-formed Fibrils at room temperature. • Aliquoting: Recommend to aliquot Pre-formed Fibrils into single-use tubes. As Pre-formed Fibrils are provided as a suspension, thoroughly pipette up and down before aliquoting to ensure sample homogeneity. • Storage Condition: Store aliquots at -80°C. Do not store at 4°C. Please avoid unnecessary freeze thaw, freeze-thaw cycles will degrade Pre-formed Fibrils by dissociating the fibrils and causing non-specific aggregates. • Sonication: Prior to in vitro or in vivo use, sonication is applied to prepare fibrils with a length of ≤ 50 nm. Longer fibrils result in reduced or absent toxicity. For sonication equipment selection, either a probe sonicator or bath sonicators can be used, please refer to the respective manuals for parameter settings.

Background	
Tau is an intrinsically disordered protein that stabilizes microtubules (MTs) to promote axonal transport. In Alzheimer's disease (AD), this highly soluble protein aggregates into intracellular neurofibrillary tangles, whose spreading in the brain is the basis of current neuropathological staging of AD. Tau amyloid formation also occurs in other neurodegenerative diseases such as corticobasal degeneration (CBD) and progressive supranuclear palsy (PSP).Although the precise molecular mechanism of tau aggregation is still largely unknown, many structures of aggregated tau have now been determined. Early transmission electron microscopy (TEM) images of paired helical filaments (PHFs) and straight filaments of AD tau showed a fuzzy exterior, which can be removed by pronase to reveal an ordered core.	

Assay Data	
ELISA Data	

Human Tau-441 Pre-formed Fibrils, No Tag ELISA
0.05µg Human Tau-441 Pre-formed Fibrils, No Tag Per Well



Immobilized Human Tau-441 Pre-formed Fibrils, No Tag at 0.5µg/ml (100µl/well) on the plate.
Dose response curve for Etalantag, hFc Tag with the EC50 of 0.67ng/ml determined by ELISA.

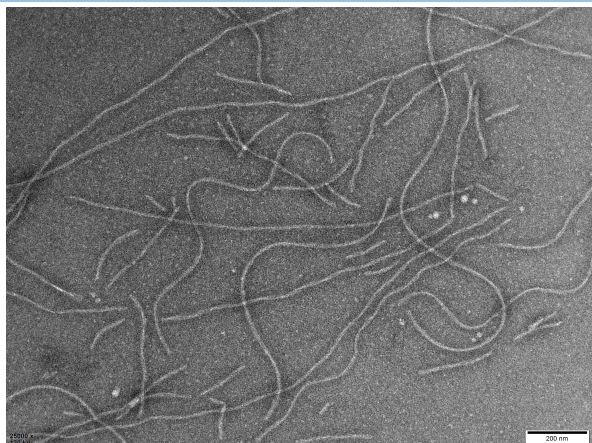
Transmission Electron Microscopy

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Assay Data



Negative-stain transmission electron microscopy (TEM) images of Human Tau-441 Pre-formed Fibrils, No Tag. Distinct fibrillar structures are visible in TEM micrographs of this product.