

## Datasheet

<b>Product Name:</b>	Tau 441 Preformed Fibrils
<b>Catalog #:</b>	TF-1001
<b>Source:</b>	Recombinant. A DNA sequence encoding the human Tau 441 sequence was expressed in <i>E. coli</i> and was then made into preformed fibrils.
<b>Estimated Size:</b>	50nm-200nm*
<b>Monomer Sequence:</b>	MAEPRQEFEV MEDHAGTYGL GDRKDQGGYT MHQDQEGDTD AGLKESPLQT PTEDGSEEPG SETSDAKSTP TAEDVTAPLV DEGAPGKQAA AQPHEIPEG TTAEEAGIGD TPSLEDEAAG HVTQARMVSK SKDGTGSDDK KAKGADGKTK IATPRGAAPP GQKGQANATR IPAKTPPAPK TPPSSGEPK SGDRSGYSSP GSPGTPGSRs RTPSLPTPPT REPKKVAVVR TPPKSPSSAK SRLQTAPVPM PDLKNVSKI GSTENLKHQP GGGKVQIINK KLDLSNVQSK CGSKDNIKHV PGGGSVQIVY KPVDSLKVTs KCGSLGNIHH KPGGGQVEVK SEKLDFKDRV QSKIGSLDNI THVPGGGNKK IETHKLTFRN NAKAKTDHGA EIVYKSPVVS GDTSPRHLSN VSSTGSIDMV DSPQLATLAD EVSASLAKQG L
<b>Protein Purity:</b>	>90%
<b>Counter Ion:</b>	100mM MES, 150mM NaCl pH 6.8
<b>Supplied As:</b>	Liquid
<b>Storage:</b>	-80°C
<b>Description:</b>	These preformed fibrils of Tau 441 may be used as a model for the pathogenic form of Tau in numerous tauopathies. Sourced from <i>E. coli</i> , Tau 441 fibrils were prepared and confirmed by thioflavin assay and electron microscopy, which shows an average size ranging from 50nm-200nm. Applications of this product range from in vitro studies on fibril formation and stability <sup>1</sup> to in vivo studies on cellular uptake, cell viability and pathway activation <sup>2</sup> . This product is also suitable for use in mouse models for studies involving memory, neuronal health, or seeding and prion like spreading <sup>3</sup> . Recent assessment of the Amyloid hypothesis has led to the realization that wildtype tau is accumulated in various tauopathies including Alzheimer's disease, Pick's disease, and progressive supranuclear palsy among others. Applied to either in vivo or in vitro experiments, these fibrils may be utilized to investigate the mechanism of various tauopathies.

### References:

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3. Veys L, et al. Front Aging Neurosci. 2021 Jan 15;12:614587. doi: 10.3389/fnagi.2020.614587. PMID: 33519421; PMCID: PMC7843377.

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1050 Barber Creek Bldg 300 Suite 103 • Watkinsville • Georgia • 30677 • USA  
Tel 678-753-0747 • Fax 678-753-0746 • E-mail [sales@rpeptide.com](mailto:sales@rpeptide.com)

4. Kametani F, Hasegawa M. Front Neurosci. 2018;12:25. Published 2018 Jan 30. doi:10.3389/fnins.2018.00025
5. Guo JL, Lee VM. 2013 Aug 2;587(15):2484]. FEBS Lett. 2013;587(6):717-723. doi:10.1016/j.febslet.2013.01.051
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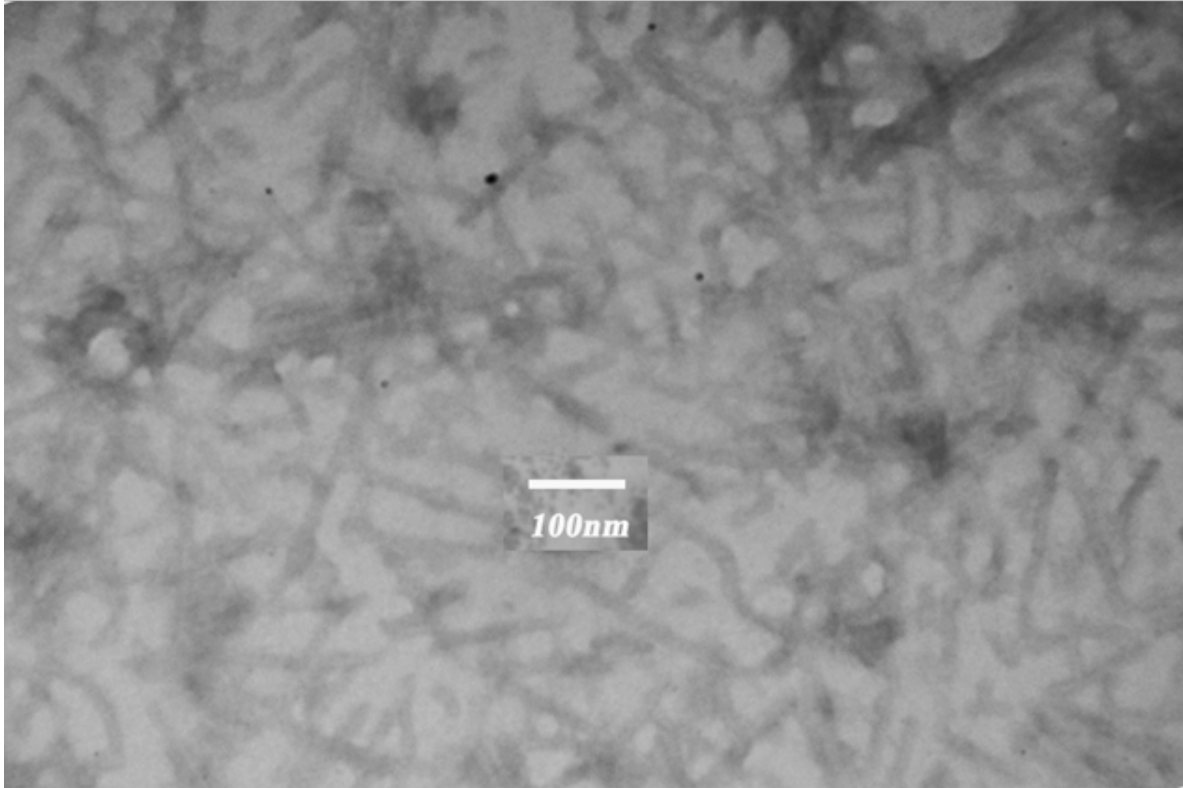


Figure: TEM of Tau 441 Preformed Fibrils

*\*The Tau 441 Preformed Fibrils were produced from recombinantly purified, native monomeric protein. The fibrils are intended to be inactive to provide safer use but have not been tested for activity. The product has an average estimated size of 50nm-200nm as determined by TEM.\**

**Not for human use. for research purposes only**

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1050 Barber Creek Bldg 300 Suite 103 • Watkinsville • Georgia • 30677 • USA  
Tel 678-753-0747 • Fax 678-753-0746 • E-mail [sales@rpeptide.com](mailto:sales@rpeptide.com)