

Tau-412 (1N4R) Wild-Type Monomers



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Human Recombinant Tau-412 (1N4R) Wild-Type
Monomers
Catalog No. SPR-511

distributed in the US/Canada by:

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Product Name

Tau-412 (1N4R) Wild-Type Monomers

Description

Human Recombinant Tau-412 (1N4R) Wild-Type Monomers

Applications

WB, SDS PAGE, In vitro Assay

Concentration

Lot/batch specific. See included datasheet.

Conjugates

No tag

Nature

Recombinant

Species

Human

Expression System

E. coli

Amino Acid Sequence

MAEPRQEFEVMEHDHAGTYGLGDRKDQGGYTMHQDQEGDTDAGLKESPLQTPTEGSEEPGSETSDAKSTPTAEAEAEAGIGD
TPSLEDEAAGHVTQARMVSKSKDGTGSDDKKAKGADGKTKIATPRGAAPPQKQGQANATRIPAKTPPAPKTPPSSGEPKSG
DRSGYSSPGSPGTPGSRSRTPSLPTPTREPKKVAVVRTPPKSPSSAKSRLQTAPVPMPLKKNVSKIGSTENLKHQPGGGKVQI
INKKLDLSNVQSKCGSKDNIKHVPGGGSVQIVYKPVVLSKVTSCGSLGNIHHKPGGGQVEVKSEKLDKDRVQSKIGSLDNIT
HVPGGGNKKIETHKLTFRNAKAKTDHGAEIVYKSPVWVGDTSPRHLSNVSSSTGSIDMVDSPQLATLADEVASLAKQGL

Purity

>95%

Other Resources

Protein Length

412 aa

Protein Size

42.967 kDa

Field Of Use

Not for use in humans. Not for use in diagnostics or therapeutics. For in vitro research use only.

Properties

Storage Buffer

10mM Hepes pH 7.4, 100mM NaCl

Storage Temperature

-80°C

Shipping Temperature

Dry Ice. Shipping note: Product will be shipped separately from other products purchased in the same order.

Purification

Ion-exchange Purified

Cite This Product

Human Recombinant Tau-412 (1N4R) Wild-Type Monomers (StressMarq Biosciences Inc., Victoria BC CANADA, Catalog # SPR-511)

Certificate Of Analysis

Protein certified >95% pure on SDS-PAGE & Nanodrop analysis. Low endotoxin <5 EU/mL @ 2mg/mL.

Other Relevant Information

For corresponding PFFs, see catalog# SPR-512

Biological Description

Alternative Names

Tau monomer, Tau protein monomer, Tau protein, microtubule-associated protein Tau, MAPT, MAP, microtubule-associated protein, Truncated Tau Protein Monomer, Tau-E, Tau 412

Research Areas

Alzheimer's Disease, Neurodegeneration, Neuroscience, Tangles & Tau

Swiss Prot

P10636-7

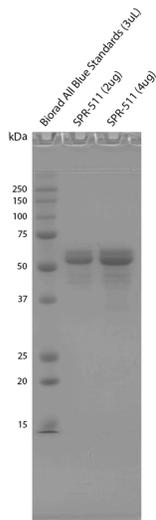
Scientific Background

Several tau isoforms, including 1N3R, are expressed in the human brain, and the existence of multiple human tauopathies with distinct fibril morphologies suggests different molecular conformers incorporating different isoforms may exist (1, 2). NMR data indicates that both 3R and 4R tau are incorporated into AD-tau seeded fibrils (3).

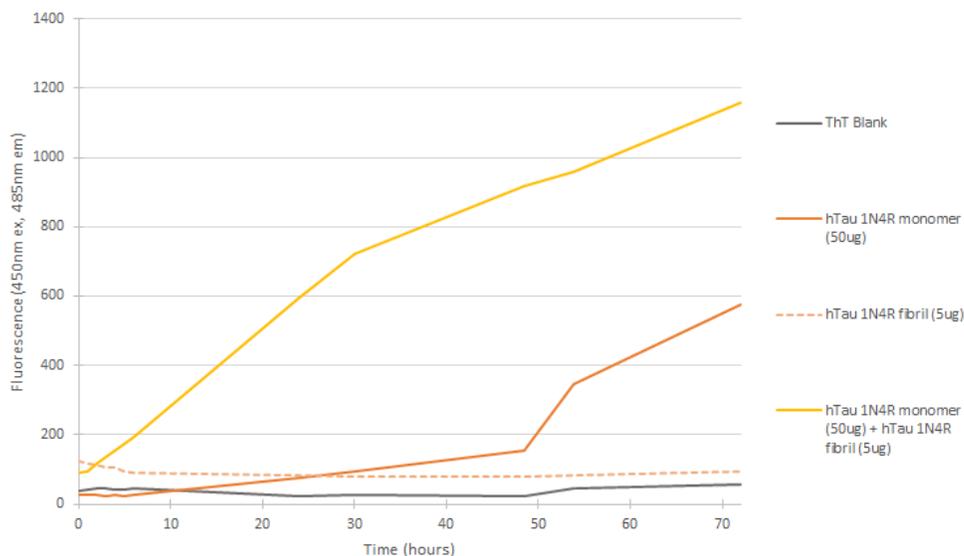
References

1. Goedert et al. 1989. Multiple isoforms of human microtubule-associated protein tau: sequences and localization in neurofibrillary tangles of Alzheimer's disease. *Neuron*. DOI: 10.1016/0896-6273(89)90210-9
2. Goedert, Eisenberg and Crowther. 2017. Propagation of Tau Aggregates and Neurodegeneration. *Annual Review of Neuroscience*. DOI: 10.1146/annurev-neuro-072116-031153
3. Dregni et al. 2022. Fluent molecular mixing of Tau isoforms in Alzheimer's disease neurofibrillary tangles. *Nature communications*. DOI: 10.1038/s41467-022-30585-0

Product Images



SDS-PAGE analysis of purified E. coli expressed hTau-412 (1N4R) monomer on a 12% Tris-Glycine gel.



In vitro seeding activity of human Tau-412 (1N4R) monomer in ThT assay. Tau 1N4R pre-formed fibrils seed fibril formation of human Tau-412 (1N4R) monomers over 72 hours. Reactions (100uL) shaken at 600 rpm in Greiner-Bio 96 Well Non-Binding Cell Culture Microplates, Black (Greiner-Bio Catalog #655900) at 37oC in the presence of 25 uM ThT and 10 uM heparin and read with an XPS Microplate Reader set at 450nmex/485nmem.

Product Citations

Reviews

There are no reviews yet.