

Product Information Sheet

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| Product Name: | Recombinant Human Tau (Tau-441) Protein, GST tagged |
| Catalog Number: | AS-55557 |
| Lot Number: | See label on the vial |
| Amount/size: | 50 µg, 100 µg |
| Source: | The sequence (Accession # AAC04279.1) corresponding to the full length human Tau-441 (2N4R isoform) protein along with GST tag was expressed in <i>E. coli</i> . The recombinant Tau-441 protein was purified from bacterial lysate using proprietary method. |
| Molecular Mass: | 71.8 kDa. |
| Purity: | Greater than 90% as determined by SDS-PAGE. |
| Storage: | The purified GST-Tau-441 is supplied as lyophilized powder from phosphate buffered saline (pH 7.4). Store at 2-4 °C for immediate use within 1-2 weeks or at -80 °C for long-term storage. |

Instructions:

Microtubule associated protein (Tau) is found predominantly in the central neural system and its major function is to promote assembly and to stabilize neuronal microtubules.¹⁻⁵ Six isoforms of Tau were identified in humans that are differentiated by the exclusion or inclusion of exons 2, 3, and 10.²⁻⁵ Tau-441 is the longest of Tau isoforms that consists of 441 amino acids with molecular mass of 45.8 kDa.

Under physiological conditions Tau can undergo abnormal phosphorylation, truncation, or other modifications that result in the protein detachment from microtubules.¹⁻⁵ These modified Tau molecules can self-associate and form different types of aggregates including neurofibrillary tangles (NFTs) found in brains of patients with neurodegenerative diseases such as Alzheimer's disease.¹⁻⁵

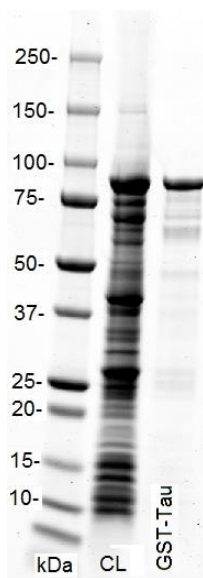


Figure 1.

Figure 1. Human GST-Tau-441 on SDS-PAGE.

Purified protein was loaded onto 10-20% Tris-HCl gel at 2 µg/well.
 CL=unpurified cell lysate,
 GST-Tau=purified GST-Tau fusion protein,



Related Products

| Product Name | Cat. # |
|---|-----------------|
| <u>Anti-Tau (pSer400) Antibody</u> | AS-54978 |
| <u>Anti-Tau (393-411) Antibody</u> | AS-54979 |
| Recombinant Human Tau (Tau-441) Protein, no tag | AS-55556 |

References:

1. Bulic B., et al., *Neuropharmacology* **59**: 276-289 (2010).
2. Voss K., et al., *Mol. Neurodegen.* **4** (18) : 1-12 (2009).
3. Rankin C.A., et al., *Mol. Neurodegen.* **2** (12) : 1-14 (2007).
4. Patterson K. R., et al., *J. of Biol. Chem.* 286 (26) : 23063-23076 (2011).
5. Wang Y., et al., *Biochem. Soc. Trans.* 38 : 955-961 (2010)

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