

## Tau-441, GSK3beta-phosphorylated Recombinant Protein | Tau-441 recombinant protein

Tau-441, GSK3beta-phosphorylated

|                              |                       |                                     |
|------------------------------|-----------------------|-------------------------------------|
| CATALOG #<br><b>AAA74009</b> | HOST<br><b>E Coli</b> | APPLICATIONS<br><b>Western Blot</b> |
|------------------------------|-----------------------|-------------------------------------|

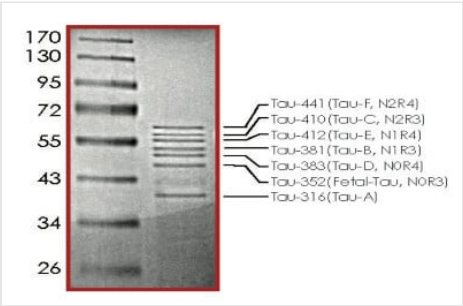
### PRODUCT SYNONYMS

Tau-441; GSK3beta-phosphorylated; Tau-F; (N2R4); Tau-4; MAPT; MSTD; PPND; DDPAC; MAPTL; MTBT1; MTBT2; FTDP-17; FLJ31424; MGC138549; Tau-441 recombinant protein

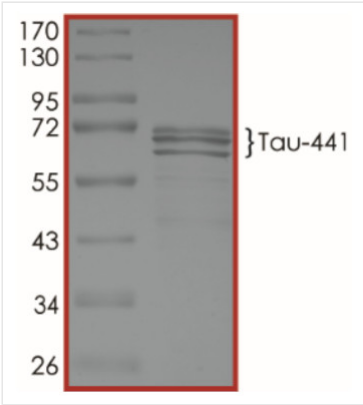
### PRODUCT SPECIFICATIONS

|                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                                    | E Coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Purity/Purification                                     | >85%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Form/Format                                             | Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 1mM DTT, 10% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Concentration                                           | 0.2ug/ul (varies by lot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Applicable Applications for Tau-441 recombinant protein | WB (Western Blot), Kinase Assay                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Tag                                                     | TAG-Free                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Species                                                 | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Scientific Background                                   | Tau-441 or Tau-F is a member of the Tau family of proteins which function to stabilize the microtubules by binding to them. Tau proteins are subject to phosphorylation and this phenomenon regulates the association of the Tau protein with the microtubules (1). Deposits of Alzheimer's disease AD-associated proteins, such as hyperphosphorylated Tau, as well as other shared misfolded proteins, such as, beta-amyloid precursor protein (betaAPP), ubiquitin, and various chaperones and protein kinases are thought to play a pathologic role in the cognitive decline and muscular failure. Malfunctioning of Tau proteins is associated with microtubules disintegration and collapsing of the neuronal transport system (2). |
| Dry Ice Note                                            | The product may be shipped with dry ice, and an additional fee may be added to your shipping cost.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Preparation and Storage                                 | Store product at -70°C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

IMAGES



**SDS-PAGE**  
Tau Proteins: Representation of seven Tau proteins, from top to bottom: Tau-441, Tau-410, Tau-412, Tau-381, Tau-383, Tau-352 and Tau-316 (Tau Protein Marker; # ).



**SDS-PAGE**  
Purity: SDS-PAGE image of purified Tau Proteins. Lane 1, Tau-441, GSK3beta - phosphorylated. Lane 2, Tau-441 Protein

ADDITIONAL INFORMATION

|                                                           |                                                                                                                                                                                                                                                                                                     |
|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Categories/Family for Tau-441 recombinant protein | Tau Proteins; Invasion/Metastasis; Neurobiology; p38 Pathway                                                                                                                                                                                                                                        |
| References                                                | 1. Zilka, N., et al. Truncated tau from sporadic Alzheimer's disease suffices to drive neurofibrillary degeneration in vivo. FEBS Lett. 2006; 508: 3582-3588.<br>2. Rial, A. et al: Calcium Dyshomeostasis in beta-Amyloid and Tau-bearing Skeletal Myotubes. J. Biol. Chem., 2004; 279: 3524-53532 |

NCBI AND UNIPROT INFORMATION

|                                  |                                                                                                                                                                                                              |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI GI #                        | 294862258                                                                                                                                                                                                    |
| NCBI GeneID                      | 4137                                                                                                                                                                                                         |
| NCBI Accession #                 | NP_001116538.2                                                                                                                                                                                               |
| NCBI GenBank Nucleotide #        | NM_001123066.3                                                                                                                                                                                               |
| UniProt Accession #              | P10636; P18518; Q14799; Q15549; Q15550; Q15551; Q1RMF6; Q53YB1; Q5CZ17; Q5XWF0; Q6QT54; Q9UDJ3                                                                                                               |
| NCBI Official Full Name          | microtubule-associated protein tau isoform 6                                                                                                                                                                 |
| NCBI Official Synonym Full Names | microtubule-associated protein tau                                                                                                                                                                           |
| NCBI Official Symbol             | MAPT                                                                                                                                                                                                         |
| NCBI Official Synonym Symbols    | TAU; MSTD; PPND; DDPAC; MAPTL; MTBT1; MTBT2; FTDP-17                                                                                                                                                         |
| NCBI Protein Information         | microtubule-associated protein tau; PHF-tau; paired helical filament-tau; neurofibrillary tangle protein; microtubule-associated protein tau, isoform 4; G protein beta1/gamma2 subunit-interacting factor 1 |
| UniProt Protein Name             | Microtubule-associated protein tau                                                                                                                                                                           |
| UniProt Gene Name                | MAPT                                                                                                                                                                                                         |
| UniProt Synonym Gene Names       | MAPTL; MTBT1; TAU; PHF-tau                                                                                                                                                                                   |
| UniProt Entry Name               | TAU_HUMAN                                                                                                                                                                                                    |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.