Data Sheet (Cat.No.TMPY-07171)

TargetMol

Tau-E Protein, Human, Recombinant (His)

General Information

Synonyms:	MAPTL;MSTD;FLJ31424;MTBT1;MGC138549;PPND;TAU;DDPAC;Tau-PHF6;tau-40;MTBT2;PPP1R103;FTDP-17
Protein Construction:	A DNA sequence encoding the Human Tau / TAU412 (NP_001116539.1) (Ala2-Leu412) was expressed, with a polyhistidine tag at the N-terminus.
Species:	Human
Expression Host:	E. coli
Accession:	P10636-7
Molecular Weight:	43.8 kDa (predicted)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	≥ 95% as determined by SDS-PAGE. ≥ 90% as determined by SEC-HPLC.
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from sterile 50mM Tris, 150mM NaCl, 1mM tcep, 1mM EDTA, pH 7.0. Please contact us for any concerns or special requirements. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the hardcopy of datasheet or the lot-specific COA.

Preparation and Storage

Reconstitution:

Please refer to the lot-specific COA.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

MAPT (microtubule-associated protein tau) can produce tau proteins. Tau proteins are proteins that stabilize microtubules. They are abundant in neurons of the central nervous system and are less common elsewhere, but are also expressed at very low levels in CNS astrocytes and oligodendrocytes. When tau proteins are defective, and no longer stabilize microtubules properly, they can result in dementias such as Alzheimer's disease. Tau

protein is a highly soluble microtubule-associated protein (MAP). In humans, these proteins are mostly found in neurons compared to non-neuronal cells. One of tau's main functions is to modulate the stability of axonal microtubules. Other nervous system MAPs may perform similar functions, as suggested by tau knockout mice, who did not show abnormalities in brain development - possibly because of compensation in tau deficiency by other MAPs.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481