Recombinant Human Tau-D Protein (His Tag)

Catalog Number: PKSH032757

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description	
Species	Human
Source	E.coli-derived Human Tau-D protein Gln249-Gln381, with an C-terminal His
Calculated MW	15.4 kDa
Observed MW	16 kDa
Accession	P10636-6
Bio-activity	Not validated for activity
Properties	
Purity	> 80 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80
	°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of
	reconstituted samples are stable at $< -20^{\circ}$ C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from a 0.2 µm filtered solution of PBS, 1mM PMSF, pH 7.4.
	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 printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 80 % as determined by reducing SDS-PAGE.

Background

Microtubule-Associated Protein TAU is abundantly expressed in neurons of the central nervous system and less commonly expressed elsewhere, but is also expressed at very low levels in CNS astrocytes and oligodendrocytes. Tau interacts with tubulin to stabilize microtubules and promotes tubulin assembly into microtubules. The C-terminus of TAU binds axonal microtubules while the N-terminus binds neural plasma membrane components, suggesting that tau acts as a linker protein. When tau is defective, and no longer stabilize microtubules properly, it can result in dementias such as Alzheimer's disease and other tauopathies.