

Human TPST1 Protein (His Tag)

Catalog Number: 11258-H07H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

TANGO13A; R75054; Tango13a

Protein Construction:

A DNA sequence encoding the human TPST1 (NP_003587.1) extracellular domain (Gln 26-Glu 370) was expressed, with a polyhistidine tag at the N-terminus.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 80 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: His

Molecular Mass:

The recombinant human TPST1 consists of 361 amino acids and has a calculated molecular mass of 41.7 kDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rhTPST1 is approximately 45-48 kDa due to glycosylation.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

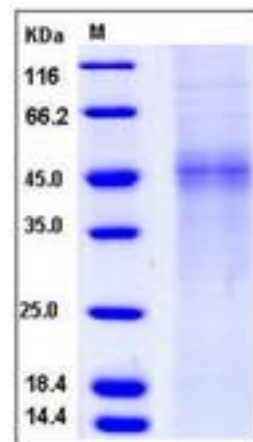
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Protein-tyrosine sulfotransferase 1, also known as Tyrosylprotein sulfotransferase 1 and TPST1, is a single-pass type I I membrane protein which belongs to the protein sulfotransferase family. Tyrosine O-sulfation is a common posttranslational modification of proteins in all multicellular organisms. This reaction is mediated by a Golgi enzyme activity called tyrosylprotein sulfotransferase (TPST) that catalyzes the transfer of sulfate from 3'-phosphoadenosine 5'-phosphosulfate to tyrosine residues within acidic motifs of polypeptides. Tyrosine O-sulfation has been shown to be important in protein-protein interactions in several systems. Tyrosine sulfation is mediated by one of two Golgi isoenzymes, called tyrosylprotein sulfotransferases (TPST-1 and TPST-2). A relatively small number of proteins are known to undergo tyrosine sulfation, including certain adhesion molecules, G-protein-coupled receptors, coagulation factors, serpins, extracellular matrix proteins, and hormones. TPST1 is a human tyrosylprotein sulfotransferase that uses 3'phosphoadenosine-5'phosphosulfate (PAPS) to transfer the sulfate moiety to proteins predominantly designated for secretion. TPST1 bears N-linked glycosyl residues exclusively at position Asn60 and Asn262. TPST1 and TPST2 have distinct biological roles that may reflect differences in their macromolecular substrate specificity.

References

- 1.Ouyang Y.-B.et al., 1998, Proc. Natl. Acad. Sci. USA. 95: 2896-901.
- 2.Ouyang,Y.B. et al., 2002,J Biol Chem. 277 (26):23781-7.
- 3.Hoffhines, A.J. et al., 2006, J Biol Chem. 281 (49):37877-87.

Manufactured By Sino Biological Inc., FOR RESEARCH USE ONLY. NOT FOR USE IN HUMANS.

Fax :+86-10-51029969 • Tel:+86-400-890-9989 • <http://www.sinobiological.com>