



Recombinant Protein Technical Manual

Recombinant Human TPST1 Protein (His Tag)

RPES1659

Product Data:

Product SKU: RPES1659

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_003587.1

Protein Information:

Molecular Mass: 41.7 kDa

AP Molecular Mass: 45-48 kDa

Tag: N-His

Bio-activity:

Purity: > 80 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: 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°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: TANGO13A

Immunogen Information:

Sequence: Gln 26-Glu 370

Background:

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 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.