Recombinant TPSTA protein (His tag)

Catalog Number	533130
Synonyms	Tyrosylprotein sulfotransferase A; TPST-A
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	O77081
Gene ID	176684
Molecular Weight	Predictes a molecular mass of 37.65 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	64-380
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 64-380 aa (O77081) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Protein-tyrosine sulfotransferase A (TPST-A) fragment (residues 64-380) from Caenorhabditis elegans, offering a stable and soluble unit for studying tyrosine O-sulfation mechanisms in biochemical and structural research. Protein-tyrosine sulfotransferase A (TPST-A) catalyzes the O-sulfation of tyrosine residues in polypeptides using 3'-phosphoadenylyl sulfate (PAPS) as a cosubstrate, a key post-translational modification that regulates protein function and interactions. The full-length protein is localized to the Golgi apparatus membrane as a single-pass type II membrane protein, where it facilitates sulfation within acidic motifs, influencing processes such as cell signaling and protein maturation. This fragment has been selected to provide a soluble, functional domain suitable for experimental applications without membrane-associated complexities.