Recombinant TPST protein (His tag)

Catalog Number	532987
Synonyms	Transport and Golgi organization protein 13; Tango-13; Tyrosylprotein sulfotransferase
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9VYB7
Gene ID	32312
Molecular Weight	Predictes a molecular mass of 40.32 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	31-366
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 31-366 aa (Q9VYB7) 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	This recombinant protein is a 336-amino acid fragment (residues 31-366) of Drosophila melanogaster Protein-tyrosine sulfotransferase (TPST), also known as Transport and Golgi organization protein 13 (Tango-13). It represents a stable, soluble unit optimized for structural and biochemical studies, enabling investigation into tyrosine O-sulfation mechanisms and protein secretion roles. Protein-tyrosine sulfotransferase (EC 2.8.2.20) catalyzes the O-sulfation of tyrosine residues within acidic motifs of polypeptides, a key post-translational modification. The full-length protein plays a critical role in protein secretion and is localized to the Golgi apparatus membrane as a single-pass type II membrane protein. This enzyme's activity is essential for proper protein function and trafficking, with implications for understanding secretory pathways and post-translational regulatory mechanisms in biological systems.