Recombinant PPT2 protein (His tag)

Catalog Number	534444
Synonyms	PPT-2
Species	Drosophila melanogaster
Expression System	E. coli
Accession	Q9VKH6
Gene ID	34564
Molecular Weight	Predictes a molecular mass of 31.92 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 32 kDa band.

Product Information

Sequence Region	23-288
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 23-288 aa (Q9VKH6) 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 Lysosomal Thioesterase PPT2 Homolog (PPT-2) Fragment (Drosophila melanogaster) – a high-purity, soluble protein fragment (residues 23-288) designed for structural and biochemical studies. This fragment retains key catalytic activity, enabling research into thioester bond hydrolysis mechanisms. The full-length PPT-2 protein, encoded by the Ppt2 gene, is a lysosomal thioesterase (EC 3.1.2.2) that specifically cleaves thioester bonds in substrates like S-palmitoyl-CoA and S-palmitoyl-N-acetylcysteamine. It exhibits activity against both long and short-chain fatty acyl-CoA substrates but does not hydrolyze palmitoylcysteine, palmitoylated proteins, or branched/bulky structures. Localized to the lysosome, PPT-2 plays a critical role in lipid metabolism by processing unbranched fatty acyl thioesters, contributing to cellular homeostasis. This recombinant fragment provides a stable, functional unit for investigating its enzymatic properties and biological significance.