Recombinant COPG protein (His tag)

Catalog Number	535069
Synonyms	Gamma-coat protein; Gamma-COP
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q22498
Gene ID	177891
Molecular Weight	Predictes a molecular mass of 29.94 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	609-870
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 609-870 aa (Q22498) 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 Probable Coatomer Subunit Gamma (Gamma-COP) Fragment (residues 609-870) from Caenorhabditis elegans, a stable and soluble protein unit ideal for structural biology and biochemical studies of intracellular transport mechanisms. The full-length Probable Coatomer Subunit Gamma (Gamma-COP), encoded by the copg-1 gene in Caenorhabditis elegans, is a key component of the coatomer complex. This cytosolic protein complex binds to dilysine motifs and reversibly associates with Golgi non-clathrin-coated vesicles, facilitating biosynthetic protein transport from the endoplasmic reticulum (ER) through the Golgi apparatus to the trans Golgi network. It is essential for vesicle budding from Golgi membranes and mediates retrograde transport of dilysine-tagged proteins from the Golgi back to the ER. The protein localizes to the cytoplasm, Golgi apparatus membrane (as a peripheral membrane protein on the cytoplasmic side), and COPI-coated vesicle membranes, where it polymerizes to support vesicular trafficking processes. The provided fragment (residues 609-870) represents a computationally selected stable region optimized for experimental applications.