Recombinant COPE protein (His tag)

Catalog Number	544044
Synonyms	Epsilon-coat protein; Epsilon-COP
Species	Human
Expression System	E. coli
Accession	O14579
Molecular Weight	Predictes a molecular mass of 36.01 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 39 kDa band.

Product Information

Sequence Region	2-308
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 2-308 aa (O14579) 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 Coatomer subunit epsilon (Epsilon-COP) fragment (residues 2-308) from Homo sapiens, designed for structural and biochemical studies. This stable, soluble protein unit supports research into intracellular vesicle transport and Golgi-associated processes. Coatomer subunit epsilon, encoded by the COPE gene, is a component of the coatomer complex in humans. This cytosolic complex binds to dilysine motifs and reversibly associates with Golgi non-clathrin-coated vesicles, facilitating biosynthetic protein transport from the ER through the Golgi to the trans Golgi network. It is essential for vesicle budding from Golgi membranes and retrograde transport of dilysine-tagged proteins to the ER. The coatomer requires ADP-ribosylation factors (ARFs) for membrane recruitment in mammals and also contributes to Golgi structural integrity, LDL receptor processing, activity, and endocytic recycling. The protein localizes to the cytoplasm, Golgi apparatus membrane (cytoplasmic side), and COPI-coated vesicle membranes (cytoplasmic side), where it polymerizes on cytoplasmic surfaces of Golgi-derived vesicles.