Recombinant COPZ2 protein (His tag)

Catalog Number	548859
Synonyms	Zeta-2-coat protein; Zeta-2 COP
Species	Human
Expression System	E. coli
Accession	Q9P299
Molecular Weight	Predictes a molecular mass of 21.28 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	40-210
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 40-210 aa (Q9P299) 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 zeta-2 (Zeta-2 COP) fragment (residues 40-210) from Homo sapiens, a stable and soluble protein unit ideal for investigating Golgi-associated vesicular transport mechanisms. This fragment is optimized for structural and biochemical studies, offering researchers a reliable tool to explore coatomer complex dynamics and intracellular protein trafficking. Coatomer subunit zeta-2, encoded by the COPZ2 gene, is a key component of the coatomer complex—a cytosolic protein assembly essential for vesicle formation and cargo transport within the Golgi apparatus and endoplasmic reticulum-Golgi intermediate compartment. The full-length protein functions by binding dilysine motifs on cargo proteins, facilitating retrograde transport from the Golgi to the ER and regulating biosynthetic protein movement through reversible association with COPI-coated vesicles. It localizes peripherally to membranes of the Golgi, ERGIC, and COPI-coated vesicles, primarily on the cytoplasmic side, with a marked preference for ERGIC and cis-Golgi regions. This strategic localization underscores its role in maintaining Golgi integrity and coordinating intracellular trafficking pathways.