Recombinant CBPC6 protein (His tag)

Catalog Number	547458
Synonyms	ATP/GTP-binding protein-like 4; Protein deglutamylase CCP6
Species	Human
Expression System	E. coli
Accession	Q5VU57
Molecular Weight	Predictes a molecular mass of 52.83 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	1-441
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 1-441 aa (Q5VU57) 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 Cytosolic Carboxypeptidase 6 (CCP6) Fragment (1-441) – A high-purity protein tool designed for studying deglutamylation mechanisms. This fragment encompasses the complete Peptidase M14 domain, enabling targeted investigation of tubulin and non-tubulin protein modification processes in cytosolic and cytoskeletal contexts. Cytosolic carboxypeptidase 6 (AGBL4) is a metallocarboxypeptidase that catalyzes the removal of polyglutamate side chains from tubulin and other proteins like MYLK, CGAS, and KLF4. This deglutamylation activity regulates critical cellular processes including microtubule dynamics, antiviral defense activation via CGAS, and embryogenesis through KLF4 degradation. The protein localizes to the cytosol, centrosomes, Golgi apparatus, and basal bodies of cilia, where it interacts with glutamylated tubulin and gamma-tubulin. The provided fragment (residues 1-441) retains the functional Peptidase M14 domain, making it ideal for mechanistic studies of polyglutamate chain remodeling in cellular signaling and structural regulation.