Recombinant CBPC5 protein (His tag)

Catalog Number	540788
Synonyms	ATP/GTP-binding protein-like 5; Protein deglutamylase CCP5
Species	Human
Expression System	E. coli
Accession	Q8NDL9
Molecular Weight	Predictes a molecular mass of 40.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 41 kDa band.

Product Information

Sequence Region	1-342
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 1-342 aa (Q8NDL9) 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 Human Cytosolic Carboxypeptidase-like Protein 5 (CCP5) Fragment (residues 1-342) is a high-purity, soluble protein designed for structural and functional studies. This fragment retains key enzymatic characteristics, enabling research into tubulin deglutamylation and cellular regulation mechanisms. Cytosolic carboxypeptidase-like protein 5 (CCP5), encoded by the AGLB5 gene, is a metallocarboxypeptidase that catalyzes the removal of polyglutamate side chains from tubulin and mediates deglutamylation of nucleotidyltransferase CGAS, thereby activating antiviral defense responses. It specifically cleaves both alpha- and gamma-linked polyglutamate modifications on tubulin C-terminal tails, including the branching point glutamate. The protein localizes primarily to the cytoplasm and cytosol, with observed presence in the nucleus, mitotic spindle, and midbody during cytokinesis, where it colocalizes with alpha-tubulin. This recombinant fragment (residues 1-342) represents a stable, soluble unit optimized for biochemical and structural analysis of CCP5's deglutamylation functions.