Recombinant CBPC4 protein (His tag)

Catalog Number	548011
Synonyms	ATP/GTP-binding protein-like 1; Protein deglutamylase CCP4
Species	Human
Expression System	E. coli
Accession	Q96MI9
Molecular Weight	Predictes a molecular mass of 33.24 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	1-288
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 1-288 aa (Q96MI9) 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 4 (CCP4) Fragment (residues 1-288) from Homo sapiens, engineered for stability and solubility. This fragment supports structural and biochemical studies of tubulin and protein deglutamylation mechanisms, offering a reliable tool for investigating post-translational modifications. Cytosolic Carboxypeptidase 4, encoded by the AGBL1 gene, is a metallocarboxypeptidase that mediates the deglutamylation of tubulin and non-tubulin proteins such as MYLK. It specifically removes polyglutamate side chains from the gamma-carboxyl group of glutamate residues in tubulin's C-terminal tail, targeting long-side-chains while sparing the branching point glutamate. This enzyme is localized in the cytoplasm and cytosol, playing a critical role in regulating protein function through post-translational modification, with implications for cellular processes like cytoskeleton dynamics.