Recombinant MAP12 protein (His tag)

Catalog Number	538291
Synonyms	MAP 1D; MetAP 1D; Methionyl aminopeptidase type 1D, mitochondrial; Peptidase M 1D
Species	Human
Expression System	E. coli
Accession	Q6UB28
Molecular Weight	Predictes a molecular mass of 33.14 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 33 kDa band.

Product Information

Sequence Region	48-335
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 48-335 aa (Q6UB28) 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 Methionine aminopeptidase 1D, mitochondrial (MAP 1D) fragment (residues 48-335) is a high-quality, soluble protein designed for structural and biochemical studies. This 288-amino acid fragment retains key functional characteristics, offering researchers a stable tool to investigate methionine excision mechanisms and mitochondrial protein maturation. Methionine aminopeptidase 1D (MAP 1D) is a mitochondrial enzyme responsible for removing N-terminal methionine residues from nascent proteins, specifically when the subsequent amino acid is small and uncharged (e.g., alanine, cysteine, or serine). This activity occurs after deformylation of the initiator methionine and is crucial for proper protein maturation. Located exclusively in the mitochondrion, MAP 1D has been implicated in colon tumorigenesis, highlighting its potential relevance in cancer research. The provided fragment (48-335) represents a computationally optimized, stable region ideal for exploring the enzyme's catalytic properties and structural features.