Recombinant MPPA protein (His tag)

Catalog Number	547234
Synonyms	Alpha-MPP; Inactive zinc metalloprotease alpha; P-55
Species	Human
Expression System	E. coli
Accession	Q10713
Molecular Weight	Predictes a molecular mass of 55.68 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 57 kDa band.

Product Information

Sequence Region	41-525
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 41-525 aa (Q10713) 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 Mitochondrial-processing peptidase subunit alpha (Alpha-MPP) fragment (residues 41-525) is a high-purity protein designed for structural and biochemical studies. This 485-amino acid fragment, derived from the PMPCA gene, represents a stable and soluble unit optimized for investigating mitochondrial precursor protein processing mechanisms. Mitochondrial-processing peptidase subunit alpha (Alpha-MPP) is the substrate recognition and binding component of the essential mitochondrial processing protease (MPP), which cleaves mitochondrial targeting sequences from newly imported precursor proteins. This enzyme localizes to both the mitochondrial matrix and inner membrane, playing a critical role in mitochondrial protein import and maturation. The full-length protein functions as an inactive zinc metalloprotease that works in concert with its catalytic partner to ensure proper processing of nuclear-encoded mitochondrial proteins.