Recombinant CATZ protein (His tag)

Catalog Number	548448
Synonyms	Cathepsin P; Cathepsin X
Species	Human
Expression System	E. coli
Accession	Q9UBR2
Molecular Weight	Predictes a molecular mass of 28.80 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 29 kDa band.

Product Information

Sequence Region	62-303
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 62-303 aa (Q9UBR2) 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 Cathepsin Z (EC 3.4.18.1) Fragment (aa 62-303) - A highly purified protein fragment designed for structural and biochemical studies, representing a stable and soluble unit of this important lysosomal protease with carboxy-monopeptidase and carboxy-dipeptidase activities. Cathepsin Z, also known as Cathepsin P or Cathepsin X, is a lysosomal cysteine protease encoded by the CTSZ gene in humans. This enzyme exhibits both carboxy-monopeptidase and carboxy-dipeptidase activity, playing important roles in protein processing and degradation within the lysosomal compartment. Notably, Cathepsin Z is capable of producing kinin potentiating peptides, suggesting potential regulatory functions in inflammatory and vascular processes. As a lysosomal resident protein, it contributes to the essential proteolytic machinery required for cellular homeostasis and protein turnover. The selected fragment (amino acids 62-303) represents a computationally optimized region that maintains structural integrity and solubility while preserving key functional characteristics for research applications.