Recombinant CEL3B protein (His tag)

Catalog Number	546719
Synonyms	Elastase IIIB; Elastase-3B; Protease E
Species	Human
Expression System	E. coli
Accession	P08861
Molecular Weight	Predictes a molecular mass of 27.68 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	32-270
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 32-270 aa (P08861) 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 Chymotrypsin-like Elastase Family Member 3B (CELA3B) Fragment (residues 32-270) is a high-purity, soluble protein designed for structural and biochemical studies. This 239-amino acid fragment retains the key protease activity with alanine specificity, offering a stable and functional unit ideal for enzyme characterization and inhibitor screening. Chymotrypsin-like Elastase Family Member 3B (EC 3.4.21.70), also known as Elastase-3B or Protease E, is a serine protease encoded by the CELA3B gene in humans. It functions as an efficient protease with high specificity for alanine residues, though it exhibits minimal elastolytic activity. This enzyme plays a role in proteolytic processing and digestion, contributing to physiological pathways where selective cleavage of alanine-containing substrates is required. The recombinant fragment (residues 32-270) represents a stable, soluble region optimized for experimental applications, enabling detailed investigation of its catalytic mechanisms without interference from less stable domains.