Recombinant CYTM protein (His tag)

Catalog Number	542733
Synonyms	Cystatin-6; Cystatin-E
Species	Human
Expression System	E. coli
Accession	Q15828
Molecular Weight	Predictes a molecular mass of 15.25 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	29-149
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 29-149 aa (Q15828) 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 Cystatin-M (Cystatin-6/Cystatin-E) Fragment (residues 29-149) is a high-quality, soluble protein designed for robust structural and biochemical studies. This fragment, derived from the human CST6 gene, retains key functional properties, including potent inhibition of cathepsin L, cathepsin V, and legumain, making it an ideal tool for investigating protease regulation and epidermal biology. Cystatin-M, encoded by the CST6 gene in humans, is a secreted protein that functions as a high-affinity inhibitor of cathepsin L, cathepsin L2 (cathepsin V), and legumain. It plays a critical role in regulating epidermal cornification, as well as in the morphogenesis and maintenance of hair follicles. As a secreted protein, it operates extracellularly to modulate protease activity, contributing to skin and hair homeostasis. The provided fragment (residues 29-149) encompasses the stable, soluble domain of the protein, enabling detailed analysis of its inhibitory mechanisms and biological relevance.