Recombinant CYTF protein (His tag)

Catalog Number	541887
Synonyms	Cystatin-7; Cystatin-like metastasis-associated protein; CMAP; Leukocystatin
Species	Human
Expression System	E. coli
Accession	O76096
Molecular Weight	Predictes a molecular mass of 16.20 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 16 kDa band.

Product Information

Sequence Region	20-145
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 20-145 aa (O76096) 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-F (CST7) Fragment (aa 20-145) is a high-quality, soluble protein designed for structural and functional studies. This fragment, derived from human Cystatin-F, retains key inhibitory activity against cysteine proteases like papain and cathepsin L, offering a stable and reliable tool for immune regulation and biochemical research. Cystatin-F, also known as Cystatin-7 or Leukocystatin, is a cysteine protease inhibitor encoded by the CST7 gene in humans. It functions by inhibiting enzymes such as papain and cathepsin L, though with lower affinity compared to other cystatins. This protein is implicated in immune regulation, potentially through the inhibition of specific targets within the hematopoietic system, contributing to immune response modulation. Cystatin-F is localized in both secreted and cytoplasmic compartments, as supported by experimental evidence, highlighting its role in extracellular and intracellular environments. The provided fragment (aa 20-145) encompasses the functional domain, enabling focused investigations into its mechanisms and applications.