Recombinant CATF protein (His tag)

Catalog Number	541455
Synonyms	CATSF
Species	Human
Expression System	E. coli
Accession	Q9UBX1
Molecular Weight	Predictes a molecular mass of 25.25 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 25 kDa band.

Product Information

Sequence Region	271-484
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 271-484 aa (Q9UBX1) 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 F (CATSF) Fragment (271-484) is a high-purity, stable protein fragment designed for structural and biochemical studies. This fragment, derived from the lysosomal thiol protease Cathepsin F, retains key functional regions and is optimized for solubility, making it ideal for investigating protease mechanisms, protein turnover, and roles in disease processes such as tumor invasion. Cathepsin F (CATSF), encoded by the CTSF gene in humans, is a thiol protease (EC 3.4.22.41) involved in intracellular protein degradation and turnover within lysosomes. It plays a critical role in maintaining cellular homeostasis by breaking down proteins and has been implicated in pathological conditions, including tumor invasion and metastasis, highlighting its significance in cancer research. The full-length protein is localized to lysosomes, where it contributes to proteolytic processes essential for cellular function and disease progression.