Recombinant CATE protein (His tag)

Catalog Number	544407
Species	Human
Expression System	E. coli
Accession	P14091
Molecular Weight	Predictes a molecular mass of 38.27 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	54-396
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 54-396 aa (P14091) 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 E (EC 3.4.23.34) Fragment (residues 54-396) is a high-quality protein tool designed to encompass the full Peptidase A1 domain, enabling focused investigation into its enzymatic activity and role in immune and neurodegenerative processes. Cathepsin E is an aspartic protease implicated in immune regulation, particularly in the processing of antigenic peptides during MHC class II-mediated antigen presentation. It also contributes to activation-induced lymphocyte depletion in the thymus and may be involved in neuronal degeneration and glial cell activation in the brain. The proenzyme localizes to the endoplasmic reticulum and Golgi apparatus, while the mature enzyme functions within endosomes, highlighting its importance in intracellular proteolytic pathways.