Recombinant CATD protein (His tag)

Catalog Number	542044
Species	Human
Expression System	E. coli
Accession	P07339
Molecular Weight	Predictes a molecular mass of 38.08 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	78-412
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 78-412 aa (P07339) 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	This product offers a recombinant fragment of human Cathepsin D (EC 3.4.23.5), spanning residues 78-412, which fully encompasses the Peptidase A1 functional domain. It is an essential tool for researchers investigating the specific proteolytic activities and domain functions of this key lysosomal aspartic protease. Cathepsin D is an acid protease primarily active in intracellular protein degradation within lysosomes. It plays a significant role in APP (amyloid precursor protein) processing following cleavage and activation by ADAM30, leading to APP degradation, and is implicated in the pathogenesis of diseases such as breast cancer and Alzheimer's disease. The protein is mainly localized to lysosomes and melanosomes, but has also been identified in the extracellular space, loosely associated with the matrix in tissues such as the aorta, highlighting its potential roles beyond intracellular catabolism.