Recombinant DIAC protein (His tag)

Catalog Number	549745
Species	Human
Expression System	E. coli
Accession	Q01459
Molecular Weight	Predictes a molecular mass of 41.31 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	40-385
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 40-385 aa (Q01459) 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 Di-N-acetylchitobiase (EC 3.2.1.-) Fragment (residues 40-385) is a high-purity, stable protein designed for structural and biochemical studies. This 346-amino acid fragment, derived from the human CTBS gene, retains key functional characteristics and offers excellent solubility for research applications. Di-N-acetylchitobiase, encoded by the CTBS gene in humans, plays a crucial role in the degradation pathway of asparagine-linked glycoproteins. The enzyme specifically hydrolyzes the N-acetyl-beta-D-glucosamine (1-4)N-acetylglucosamine chitobiose core from the reducing end of glycoprotein bonds, following initial cleavage by glycosylasparaginase. This lysosomal enzyme is essential for proper glycoprotein catabolism and cellular homeostasis. The selected fragment (residues 40-385) represents a computationally optimized, stable domain that maintains structural integrity while providing researchers with a reliable tool for investigating the enzyme's mechanism and properties.