Recombinant GLCM2 protein (His tag)

Catalog Number	534953
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	O16581
Molecular Weight	Predictes a molecular mass of 57.05 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 57 kDa band.

Product Information

Sequence Region	24-516
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 24-516 aa (O16581) 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 Putative Glucosylceramidase 2 (EC 3.2.1.45) Fragment (residues 24-516) from Caenorhabditis elegans, offering a stable and soluble unit ideal for structural studies and enzymatic assays targeting glucosylceramide metabolism. Putative Glucosylceramidase 2, encoded by the gba-2 gene in Caenororhabditis elegans, functions as a glucosylceramidase that hydrolyzes glucosylceramides into ceramides and glucose. This enzyme is significant in sphingolipid metabolism, particularly in C. elegans, which produces unique sphingoid bases such as 15-methylhexadecasphinganine and 15-methylhexadecasphing-4-enine, highlighting its role in species-specific lipid pathways. The recombinant fragment (residues 24-516) was selected for its predicted stability and solubility, enabling detailed biochemical and structural investigations into glucosylceramide processing.