Recombinant A3LT2 protein (His tag)

Catalog Number	549131
Synonyms	Isoglobotriaosylceramide synthase; iGb3 synthase; iGb3S
Species	Human
Expression System	E. coli
Accession	U3KPV4
Molecular Weight	Predictes a molecular mass of 36.64 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 37 kDa band.

Product Information

Sequence Region	33-340
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, 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 33-340 aa (U3KPV4) 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 Alpha-1,3-galactosyltransferase 2 (A3GALT2) fragment (residues 33-340) from Homo sapiens, designed for structural and biochemical studies. This soluble, stable fragment retains catalytic activity, enabling research into glycosphingolipid synthesis and galactose transfer mechanisms. Alpha-1,3-galactosyltransferase 2 (EC 2.4.1.87), also known as Isoglobotriaosylceramide synthase (iGb3S), synthesizes the galactose-alpha(1,3)-galactose moiety on the glycosphingolipid isoglobotrihexosylceramide (iGb3). It catalyzes galactose transfer from UDP-Galactose to Gal-beta-1,4-Glc-ceramide and can further extend iGb3 into polygalactose structures. The full-length protein is localized to the Golgi apparatus and Golgi stack membrane as a single-pass type II membrane protein, with additional presence in cytoplasmic vesicles, underscoring its role in glycosphingolipid biosynthesis within the secretory pathway.