Recombinant B3GN3 protein (His tag)

Catalog Number	548547
Synonyms	Beta-1,3-galactosyl-O-glycosyl-glycoprotein beta-1,3-N-acetylglucosaminyltransferase; Beta-1,3-galactosyltransferase 8; Beta-1,3-GalTase 8; Beta3Gal-T8; Beta3GalT8; b3Gal-T8; Beta-3-Gx-T8; Core 1 extending beta-1,3-N-acetylglucosaminyltransferase; Core1-beta3GlcNAcT; Transmembrane protein 3; UDP-Gal:beta-GlcNAc beta-1,3-galactosyltransferase 8; UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosaminyltransferase 3; BGnT-3; Beta-1,3-Gn-T3; Beta-1,3-N-acetylglucosaminyltransferase 3; Beta3Gn-T3; UDP-galactose:beta-N-acetylglucosamine beta-1,3-galactosyltransferase 8
Species	Human
Expression System	E. coli
Accession	Q9Y2A9
Molecular Weight	Predictes a molecular mass of 37.98 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 38 kDa band.

Product Information

Sequence Region	57-372
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 57-372 aa (Q9Y2A9) 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 is a recombinant fragment of human N-acetyllactosaminide beta-1,3-N-acetylglucosaminyltransferase 3 (B3GNT3), spanning residues 57-372. This 316-amino acid fragment has been computationally optimized for stability and solubility, making it an ideal tool for structural studies, enzymatic assays, and functional investigations of glycosyltransferase activity. B3GNT3 is a Golgi apparatus membrane-bound glycosyltransferase with dual enzymatic activities. It functions as both a beta-1,3-N-acetylglucosaminyltransferase (EC 2.4.1.149) involved in poly-N-acetyllactosamine synthesis using type 2 oligosaccharides, and as a core1-1,3-N-acetylglucosaminyltransferase (Core1-beta3GlcNAcT, EC 2.4.1.146) that forms 6-sulfo sialyl Lewis x structures on extended core1 O-glycans. As a single-pass type II membrane protein, B3GNT3 plays crucial roles in glycan biosynthesis and cell surface recognition processes.