Recombinant B3GI protein (His tag)

Catalog Number	530902
Synonyms	Beta-1,3-glucuronyltransferase I; Glucuronosyltransferase I; DmGlcAT-I; UDP-GlcUA:Gal beta-1,3-Gal-R glucuronyltransferase; GlcUAT-I
Species	Drosophila melanogaster
Expression System	E. coli
Accession	O97422
Gene ID	251900
Molecular Weight	Predictes a molecular mass of 33.31 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 34 kDa band.

Product Information

Sequence Region	30-306
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 30-306 aa (O97422) 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 fragment of Drosophila melanogaster Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase I (GlcAT-I), encompassing residues 30-306. This 277-amino acid fragment represents a stable, soluble unit ideal for structural studies and enzymatic characterization of this key glycosyltransferase involved in L2/HNK-1 epitope biosynthesis. The full-length Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase I (EC 2.4.1.135) is a Golgi apparatus membrane-anchored enzyme that plays a critical role in synthesizing the L2/HNK-1 carbohydrate epitope on both glycolipids and glycoproteins. It demonstrates strict substrate specificity, exclusively transferring glucuronic acid to Gal-beta-1,3-Gal-beta-1,4-Xyl structures, with negligible activity toward other galactoside substrates. As a single-pass type II membrane protein localized to the Golgi apparatus, it functions as a key mediator in glycosylation pathways essential for neural development and cell recognition processes.