Recombinant B3GA1 protein (His tag)

Catalog Number	543797
Synonyms	Beta-1,3-glucuronyltransferase 1; Glucuronosyltransferase P; GlcAT-P; UDP-GlcUA:glycoprotein beta-1,3-glucuronyltransferase; GlcUAT-P
Species	Human
Expression System	E. coli
Accession	Q9P2W7
Molecular Weight	Predictes a molecular mass of 31.06 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 31 kDa band.

Product Information

Sequence Region	78-334
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 78-334 aa (Q9P2W7) 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 Human Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase 1 (B3GAT1) Fragment (aa 78-334) – a high-purity, soluble protein fragment engineered for structural and biochemical studies. This fragment retains key functional regions, enabling research into glycosylation mechanisms and carbohydrate epitope biosynthesis. Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase 1 (B3GAT1) is a Golgi apparatus membrane enzyme critical for synthesizing the L2/HNK-1 carbohydrate epitope on glycoproteins and contributing to glycosaminoglycan biosynthesis. It catalyzes the transfer of glucuronic acid from UDP-GlcUA to substrates including asialo-orosomucoid and neural cell adhesion molecules. The enzyme's activity is sphingomyelin-dependent, specifically requiring saturated fatty acid forms for optimal function. The full-length protein exists as multiple isoforms with localization in Golgi and endoplasmic reticulum membranes, playing essential roles in cell adhesion and neural development processes.