Recombinant Human B3GAT3 Protein (His Tag)

Catalog Number: PKSH033257

Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description | |
|---------------|---|
| Species | Human |
| Source | E.coli-derived Human B3GAT3 protein Glu72-Val335, with an C-terminal His |
| Calculated MW | 30.4 kDa |
| Observed MW | 31-34 kDa |
| Accession | O94766 |
| Bio-activity | Not validated for activity |
| Properties | |
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Concentration | Subject to label value. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Store at $<$ -20°C, stable for 6 months. Please minimize freeze-thaw cycles. |
| Shipping | This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel |
| | packs. Upon receipt, store it immediately at $< -20^{\circ}$ C. |
| Formulation | Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaC, 2mM EDTA, |
| | 20% Glycerol, pH 8.0. |

Data



> 95 % as determined by reducing SDS-PAGE.

Background

Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase 3 (B3GAT3) is an enzyme that in humans is encoded by the B3GAT3 gene, belongs to the glycosyltransferase 43 family. B3GAT3 is involved in a number of biological processes such as catalyzing the formation of the glycosaminoglycan-protein linkage by way of a glucuronyl transfer reaction in the final step of the biosynthesis of the linkage region of proteoglycans, forming the linkage tetrasaccharide present in heparan sulfate and chondroitin sulfate, gGlycosaminoglycans biosynthesis, transfering a glucuronic acid moiety from the uridine diphosphate-glucuronic acid (UDP-GlcUA) to the common linkage region trisaccharide Gal-beta-1,3-Gal-beta-1,4-Xyl covalently bound to a Ser residue at the glycosaminylglycan attachment site of proteoglycans. It also plays a role in the biosynthesis of 12/HNK-1 carbohydrate epitope on glycoproteins , hows strict specificity for Galbeta-1,3-Gal-beta-1,4-Xyl, exhibiting negligible incorporation into other galactoside substrates including Galbeta1-3Gal beta1-0-benzyl, Galbeta1-4GlcNAc and Galbeta1-4Glc and stimulates 2-phosphoxylose phosphatase activity of PXYLP1 in presence of uridine diphosphate-glucuronic acid (UDP-GlcUA) during completion of linkage region formation.

For Research Use Only