

## Recombinant Human B3GAT3 Protein (His Tag)

**Catalog Number:** PKSH033257

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

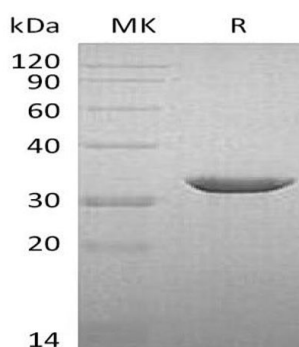
### Description

|                     |  |
|---------------------|--|
| <b>Species</b>      | Human  |
| <b>Source</b>       | E.coli-derived Human B3GAT3 protein Glu72-Val335, with an C-terminal His |
| <b>Mol_Mass</b>     | 30.4 kDa   |
| <b>Accession</b>    | O94766   |
| <b>Bio-activity</b> | Not validated for activity   |

### Properties

|                       |  |
|-----------------------|--|
| <b>Purity</b>         | > 95 % as determined by reducing SDS-PAGE.   |
| <b>Endotoxin</b>      | < 1.0 EU per µg of the protein as determined by the LAL method.  |
| <b>Storage</b>        | Store at < -20°C, stable for 6 months. Please minimize freeze-thaw cycles.   |
| <b>Shipping</b>       | This product is provided as liquid. It is shipped at frozen temperature with blue ice/gel packs. Upon receipt, store it immediately at < - 20°C. |
| <b>Formulation</b>    | Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 2mM EDTA, 20% Glycerol, pH 8.0.   |
| <b>Reconstitution</b> | Not Applicable   |

### 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, glycosaminoglycans biosynthesis, transferring 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 glycosaminoglycan attachment site of proteoglycans. It also plays a role in the biosynthesis of I2/HNK-1 carbohydrate epitope on glycoproteins, shows strict specificity for Gal-beta-1,3-Gal-beta-1,4-Xyl, exhibiting negligible incorporation into other galactoside substrates including Galbeta1-3Gal beta1-O-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

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