

Recombinant Human B3GAT3 Protein (His Tag)

Catalog No. PKSH033257

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

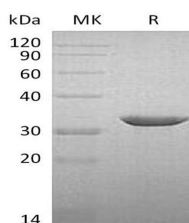
Description

Synonyms	B3GAT3;Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase 3;Beta-1;3-glucuronyltransferase 3;Glucuronosyltransferase I;GlcAT-I;GlcUAT-I;Gal beta-1;3-Gal-R glucuronyltransferase;;
Species	Human
Expression Host	E.coli
Sequence	Glu72-Val335
Accession	O94766
Calculated Molecular Weight	30.4 kDa
Observed molecular weight	31-34 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
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°C.
Formulation	Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 2mM EDTA, 20% Glycerol, pH 8.0.
Reconstitution	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

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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, 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 glycosaminylglycan attachment site of proteoglycans. It also plays a role in the biosynthesis of I2/HNK-1 carbohydrate epitope on glycoproteins, has 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.