

Product datasheet for **TP727311**

B3GAT3 Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Recombinant Human β -1,3-Glucuronyltransferase 3/B3GAT3 (C-6His)
Species:	Human
Expression cDNA Clone or AA Sequence:	Glu72-Val335
Tag:	C-His
Buffer:	Supplied as a 0.2 um filtered solution of 20mM Tris-HCl, 150mM NaCl, 2mM EDTA, 20% Glycerol, pH 8.0.
Note:	Recombinant Human Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase 3 is produced by our E.coli expression system and the target gene encoding Glu72-Val335 is expressed with a 6His tag at the C-terminus.
Storage:	Store at < -20°C, stable for 6 months after receipt. Please minimize freeze-thaw cycles.
Stability:	12 months from date of despatch
Locus ID:	26229
UniProt ID:	O94766
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;



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Summary:

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, 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, 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.

Protein Families:

Transmembrane

Protein Pathways:

Chondroitin sulfate biosynthesis, Heparan sulfate biosynthesis, Metabolic pathways