

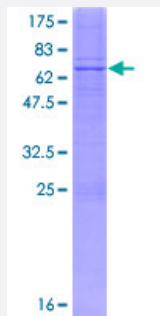
Full-Length

B4GALT7 (Human) Recombinant Protein (P01)

Catalog # H00011285-P01

Size 25 ug, 10 ug

Applications



Specification

Product Description

Human B4GALT7 full-length ORF (NP_009186.1, 1 a.a. - 327 a.a.) recombinant protein with GST-tag at N-terminal.

Sequence

MFPSRRKAAQLPWEDGRSGLLSGGLPRKCSVFHLFVACLSLGFFSLLWLQLSCSGDVARAVRG
 QGQETSGPPRACPPPEPPPEHWEEDASWGPHRLAVLVFPRERFEELLVFVPHMRRFLSRKKIRH
 HIYVLNQVDHFRFNRAALINVGFLSSNSTDYAMHDVDLLPLNEELDYGFPEAGPFHVASPELHP
 LYHYKTYVGGILLLSKQHYRLCNGMSNRFWGWGREDDFYRRIKGAGLQLFRPSGITTGYKTFRHL
 HDPAWRKRDQKRIAAQKQEQFKVDREGGLNTVKYHVASRTALSVGGAPCTVLNIMLDCDKTATP
 WCTFS

Host

Wheat Germ (in vitro)

Theoretical MW (kDa)

63.8

Interspecies Antigen Sequence

Mouse (92); Rat (92)

Preparation Method

[in vitro wheat germ expression system](#)

Purification

Glutathione Sepharose 4 Fast Flow

Quality Control Testing

12.5% SDS-PAGE Stained with Coomassie Blue.

Storage Buffer

50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.

Storage Instruction

Store at -80°C. Aliquot to avoid repeated freezing and thawing.

Note

Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — B4GALT7

Entrez GeneID[11285](#)**GeneBank Accession#**[NM_007255.1](#)**Protein Accession#**[NP_009186.1](#)**Gene Name**

B4GALT7

Gene Alias

B4GAL-T7, XGALT-1, XGALT1, XGPT1, beta4Gal-T7

Gene Description

xylosylprotein beta 1,4-galactosyltransferase, polypeptide 7 (galactosyltransferase I)

Omim ID[130070 604327](#)**Gene Ontology**[Hyperlink](#)

Gene Summary

This gene is one of seven beta-1,4-galactosyltransferase (beta4GalT) genes. They encode type II membrane-bound glycoproteins that appear to have exclusive specificity for the donor substrate UDP-galactose; all transfer galactose in a beta1,4 linkage to similar acceptor sugars: GlcNAc, Glc, and Xyl. Each beta4GalT has a distinct function in the biosynthesis of different glycoconjugates and saccharide structures. As type II membrane proteins, they have an N-terminal hydrophobic signal sequence that directs the protein to the Golgi apparatus and which then remains uncleaved to function as a transmembrane anchor. By sequence similarity, the beta4GalTs form four groups: beta4GalT1 and beta4GalT2, beta4GalT3 and beta4GalT4, beta4GalT5 and beta4GalT6, and beta4GalT7. The enzyme encoded by this gene attaches the first galactose in the common carbohydrate-protein (GlcA-beta1,3-Gal-beta1,3-Gal-beta1,4-Xyl-beta1-O-Ser) linkage found in proteoglycans. Manganese is required as a cofactor. This enzyme differs from the other six beta4GalTs because it lacks the conserved beta4GalT1-beta4GalT6 Cys residues and it is located in cis-Golgi instead of trans-Golgi. Two single-nucleotide mutations were identified from a patient with the progeroid type of Ehlers-Danlos syndrome. [provided by RefSeq]

Other Designations

beta-1,4-galactosyltransferase 7|galactosyltransferase 1 (xylosylprotein 4-beta-galactosyltransferase)|xylosylprotein beta 1,4-galactosyltransferase 7

Pathway

- [Chondroitin sulfate biosynthesis](#)
- [Heparan sulfate biosynthesis](#)
- [Metabolic pathways](#)