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B4GALT4 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP18535c

Specification

B4GALT4 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	O60513
Other Accession	NP_003769.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**40041**
Antigen Region	**91-117**

B4GALT4 Antibody (Center) - Additional Information

Gene ID 8702

Other Names
Beta-1, 4-galactosyltransferase 4, Beta-1, 4-GalTase 4, Beta4Gal-T4, b4Gal-T4, 241-, UDP-Gal:beta-GlcNAc beta-1, 4-galactosyltransferase 4, UDP-galactose:beta-N-acetylglucosamine beta-1, 4-galactosyltransferase 4, N-acetyllactosamine synthase, Nal synthase, Lactotriaosylceramide beta-1, 4-galactosyltransferase, Beta-N-acetylglucosaminyl-glycolipid beta-1, 4-galactosyltransferase, B4GALT4

Target/Specificity
This B4GALT4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 91-117 amino acids from the Central region of human B4GALT4.

Dilution
WB~~1:1000

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
B4GALT4 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

B4GALT4 Antibody (Center) - Protein Information

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Name B4GALT4 {ECO:0000303|PubMed:17690104, ECO:0000312|HGNC:HGNC:927}

Function Galactose (Gal) transferase involved in the synthesis of terminal N-acetyllactosamine (LacNac) unit present on glycan chains of glycoproteins and glycosphingolipids (PubMed:9792633, PubMed:17690104, PubMed:12511560, PubMed:32827291). Catalyzes the transfer of Gal residue via a beta1->4 linkage from UDP-Gal to the non-reducing terminal N-acetyl glucosamine 6-O-sulfate (6-O-sulfoGlcNAc) in the linearly growing chain of both N- and O-linked keratan sulfate proteoglycans. Cooperates with B3GNT7 N-acetyl glucosamine transferase and CHST6 and CHST1 sulfotransferases to construct and elongate mono- and disulfated disaccharide units [->3Galbeta1->4(6- sulfoGlcNAcbeta)1->] and [->3(6-sulfoGalbeta)1->4(6- sulfoGlcNAcbeta)1->] within keratan sulfate polymer (PubMed:17690104). Transfers Gal residue via a beta1->4 linkage to terminal 6-O- sulfoGlcNAc within the LacNac unit of core 2 O-glycans forming 6-sulfo-sialyl-Lewis X (sLex). May contribute to the generation of sLex epitope on mucin-type glycoproteins that serve as ligands for SELL/L-selectin, a major regulator of leukocyte migration (PubMed:12511560). In the biosynthesis pathway of neolacto-series glycosphingolipids, transfers Gal residue via a beta1->4 linkage to terminal GlcNAc of a lactotriaosylceramide (Lc3Cer) acceptor to form a neolactotetraosylceramide (PubMed:9792633).

Cellular Location
Golgi apparatus membrane; Single-pass type II membrane protein. Secreted

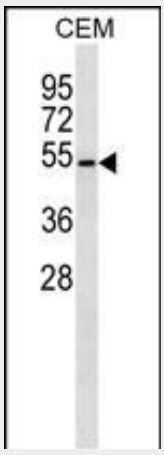
Tissue Location
Highest expression is observed in placenta, pancreas, kidney and heart (PubMed:9792633). Expressed in corneal epithelial cells (PubMed:17690104).

B4GALT4 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

B4GALT4 Antibody (Center) - Images



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B4GALT4 Antibody (Center) (Cat. #AP18535c) western blot analysis in CEM cell line lysates (35ug/lane).This demonstrates the B4GALT4 antibody detected the B4GALT4 protein (arrow).

B4GALT4 Antibody (Center) - Background

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 appears to mainly play a role in glycolipid biosynthesis. Two alternatively spliced transcript variants have been found for this gene.

B4GALT4 Antibody (Center) - References

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