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12-9245-PE: PE-conjugated Anti-B4GALT1 antibody(DMC392); IgG1 Chimeric mAb

Clonality :	Monoclonal
Clone Name :	DMC392
Application :	Flow Cyt
Reactivity :	Human
Conjugate :	PE-conjugated
Gene :	B4GALT1
Uniprot ID :	P15291
Alternative Name :	GGTB2; Beta4Gal-T1; b4Gal-T1; Nal synthase
Isotype :	Rabbit/Human Fc chimeric IgG1

Description

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. This gene is unique among the beta4GalT genes because it encodes an enzyme that participates both in glycoconjugate and lactose biosynthesis. For the first activity; the enzyme adds galactose to N-acetylglucosamine residues that are either monosaccharides or the nonreducing ends of glycoprotein carbohydrate chains. The second activity is restricted to lactating mammary tissues where the enzyme forms a heterodimer with alpha-lactalbumin to catalyze UDP-galactose D-glucose UDP lactose. The two enzymatic forms result from alternate transcription initiation sites and post-translational processing. Two transcripts; which differ only at the 5&#39 end; with approximate lengths of 4.1 kb and 3.9 kb encode the same protein. The longer transcript encodes the type II membrane-bound; trans-Golgi resident protein involved in glycoconjugate biosynthesis. The shorter transcript encodes a protein which is cleaved to form the soluble lactose synthase.

Product Info

Amount :	100 Test
Purification :	Purified from cell culture supernatant by affinity chromatography
Content :	Liquid PBS with 0.05% Proclin300, 1% BSA
Storage condition :	Store at 2°C-8°C for 6 months

Application Note

Flow Cyt 1:100

For Research Use Only. Not for use in diagnostic/therapeutics procedures.