

PRODUCT INFORMATION

Clone ID **DMC392 Target** B4GALT1

Synonyms GGTB2; Beta4Gal-T1; b4Gal-T1; Nal synthase

Host Species

PE-conjugated Anti-B4GALT1 antibody(DMC392); IgG1 Chimeric mAb Description

Delivery 3-4 weeks **Uniprot ID** P15291

Rabbit/Human Fc chimeric IgG1 IgG type

Clonality Monoclonal Reactivity Human **Applications** Flow Cyt

Recommended

Flow Cyt 1:100 **Dilutions**

Purified from cell culture supernatant by affinity **Purification**

chromatography

Formulation & Reconstitution

Background

Liquid PBS with 0.05% Proclin300, 1% BSA

Storage & Shipping Store at 2°C-8°C for 6 months

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 beta 1,4 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 Nterminal 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' 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.

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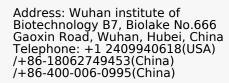
PE-conjugated Anti-B4GALT1 antibody(DMC392); IgG1 Chimeric mAb

Cat. No. DMC100392P



Conjugate

PE-conjugated



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