

B4GALT4 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant B4GALT4. Catalog # AT1256a

Specification

B4GALT4 Antibody (monoclonal) (M01) - Product Information

Application WB, E **Primary Accession** 060513 Other Accession NM 003778 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG1 Kappa Calculated MW 40041

B4GALT4 Antibody (monoclonal) (M01) - 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

B4GALT4 (NP_003769, 35 a.a. \sim 134 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

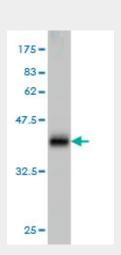
WB~~1:500~1000

Format

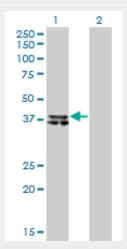
Clear, colorless solution in phosphate buffered saline, pH 7.2.

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



Western Blot analysis of B4GALT4 expression in transfected 293T cell line by B4GALT4 monoclonal antibody (M01), clone 5E2.

Lane 1: B4GALT4 transfected lysate(40 KDa). Lane 2: Non-transfected lysate.



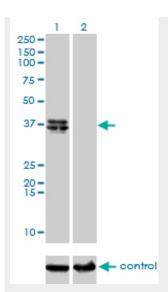
Precautions

B4GALT4 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

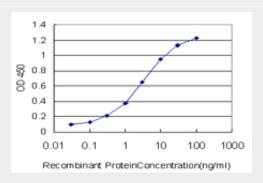
B4GALT4 Antibody (monoclonal) (M01) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cvtometv
- Cell Culture



Western blot analysis of B4GALT4 over-expressed 293 cell line, cotransfected with B4GALT4 Validated Chimera RNAi ((Cat # AT1256a)



Detection limit for recombinant GST tagged B4GALT4 is approximately 0.1ng/ml as a capture antibody.

B4GALT4 Antibody (monoclonal) (M01) - 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 (monoclonal) (M01) - References

Cloning and characterization of a novel member of human beta-1,4-galactosyltransferase gene family. Fan Y, et al. Sci China C Life Sci, 1999 Aug. PMID 18763123. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334. Complete sequencing and characterization of 21,243 full-length human cDNAs. Ota T, et al. Nat Genet, 2004 Jan. PMID 14702039. The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment. Clark HF, et al. Genome Res, 2003 Oct. PMID 12975309. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Strausberg RL, et al. Proc Natl Acad Sci U S A, 2002 Dec 24. PMID 12477932.