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B4GALT4 Antibody (monoclonal) (M01)

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

Product Information

Application	WB, E
Primary Accession	O60513
Other Accession	NM_003778
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	5E3
Calculated MW	40041

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. ~ 134 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
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.
Precautions	B4GALT4 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

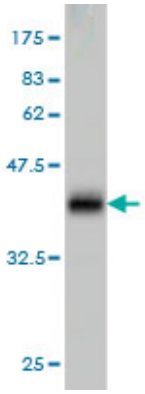
This gene is one of seven beta-1,4-galactosyltransferase (beta4GalT) genes. They encode type II membrane-bound glycoproteins that appear to have exclusive specificity for the donor substrate UDP-galactose; all transfer galactose in a beta1,4 linkage to similar acceptor sugars: GlcNAc, Glc, and Xyl. Each 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.

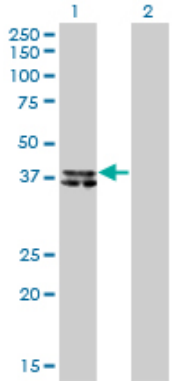
References

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.

Images

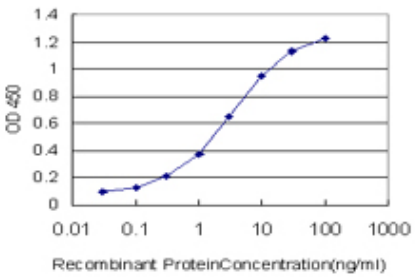


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa) .



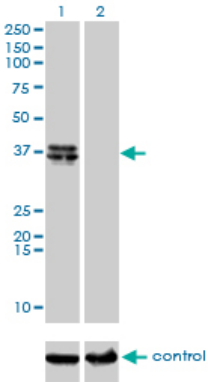
Western Blot analysis of B4GALT4 expression in transfected 293T cell line by B4GALT4 monoclonal antibody (M01), clone 5E2.

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



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

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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.