

B4GalT1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP8892b

Product Information

Application	WB, FC, E
Primary Accession	P15291
Other Accession	P15535 , P08037
Reactivity	Human, Rat, Mouse
Predicted	Bovine, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB21685
Calculated MW	43920
Antigen Region	329-358

Additional Information

Gene ID	2683
Other Names	Beta-1, 4-galactosyltransferase 1, Beta-1, 4-GalTase 1, Beta4Gal-T1, b4Gal-T1, 241-, UDP-Gal:beta-GlcNAc beta-1, 4-galactosyltransferase 1, UDP-galactose:beta-N-acetylglucosamine beta-1, 4-galactosyltransferase 1, Lactose synthase A protein, N-acetyllactosamine synthase, Nal synthase, Beta-N-acetylglucosaminylglycopeptide beta-1, 4-galactosyltransferase, Beta-N-acetylglucosaminyl-glycolipid beta-1, 4-galactosyltransferase, 241-, Processed beta-1, 4-galactosyltransferase 1, B4GALT1, GGTB2
Target/Specificity	This B4GalT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 329-358 amino acids from the C-terminal region of human B4GalT1.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. 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	B4GalT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	B4GALT1 (HGNC:924)
Synonyms	GGTB2
Function	[Beta-1,4-galactosyltransferase 1]: The Golgi complex form catalyzes the production of lactose in the lactating mammary gland and could also be responsible for the synthesis of complex-type N-linked oligosaccharides in many glycoproteins as well as the carbohydrate moieties of glycolipids.
Cellular Location	[Isoform Long]: Golgi apparatus, Golgi stack membrane; Single-pass type II membrane protein. Cell membrane; Single-pass type II membrane protein Cell surface. Cell projection, filopodium {ECO:0000250 UniProtKB:P15535}. Note=Found in trans cisternae of Golgi but is mainly localized at the plasma membrane (PubMed:1714903) B4GALT1 cell surface expression is regulated by UBE2Q1 (By similarity) {ECO:0000250 UniProtKB:P15535, ECO:0000269 PubMed:1714903} [Processed beta-1,4-galactosyltransferase 1]: Secreted. Note=Soluble form found in body fluids.
Tissue Location	Ubiquitously expressed, but at very low levels in fetal and adult brain

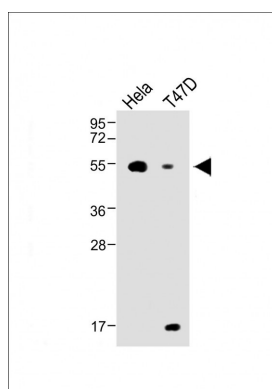
Background

B4GalT1 is 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.

References

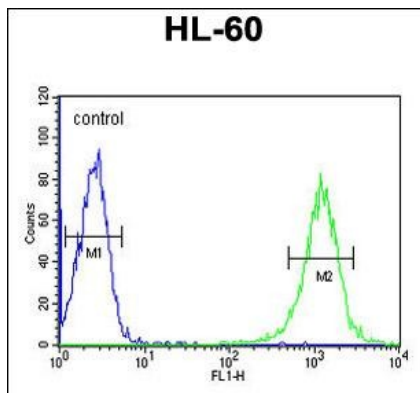
Mengle-Gaw,L., et.al., Biochem. Biophys. Res. Commun. 176 (3), 1269-1276 (1991)

Images



All lanes : Anti-B4GalT1 Antibody (C-term) at 1:1000 dilution Lane 1: HeLa, whole cell lysate Lane 2: T47D whole cell lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 50 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

B4GalT1 Antibody (C-term) (Cat. #AP8892b) flow cytometric analysis of HL-60 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



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