

## B3GALT5 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11135a

### Specification

## **B3GALT5** Antibody (N-term) - Product Information

Application	WB, FC,E
Primary Accession	<u>Q9Y2C3</u>
Other Accession	<u>NP 149362.1, NP 149363.1, NP 149360.1</u> ,
	<u>NP 149361.1, NP 006048.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	36189
Antigen Region	57-84

### **B3GALT5** Antibody (N-term) - Additional Information

Gene ID 10317

**Other Names** Beta-1, 3-galactosyltransferase 5, Beta-1, 3-GalTase 5, Beta3Gal-T5, Beta3GalT5, b3Gal-T5, 241-, Beta-3-Gx-T5, UDP-Gal:beta-GlcNAc beta-1, 3-galactosyltransferase 5, UDP-galactose:beta-N-acetylglucosamine beta-1, 3-galactosyltransferase 5, B3GALT5

#### Target/Specificity

This B3GALT5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 57-84 amino acids from the N-terminal region of human B3GALT5.

**Dilution** WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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

B3GALT5 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **B3GALT5 Antibody (N-term) - Protein Information**



## Name B3GALT5 (HGNC:920)

**Function** Catalyzes the transfer of Gal to GlcNAc-based acceptors with a preference for the core3 O-linked glycan GlcNAc(beta1,3)GalNAc structure. Can use glycolipid LC3Cer as an efficient acceptor.

**Cellular Location** 

Golgi apparatus membrane; Single- pass type II membrane protein

Tissue Location

Expressed in stomach, jejunum, colon, pancreas, small intestine, testis and gastrointestinal and pancreatic cancer cell lines. Hardly detected in lung, liver, adrenal gland and peripheral blood leukocytes.

## **B3GALT5 Antibody (N-term) - Protocols**

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

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

B3GALT5 Antibody (N-term) - Images



B3GALT5 Antibody (N-term) (Cat. #AP11135a) western blot analysis in NCI-H460 cell line lysates (35ug/lane).This demonstrates the B3GALT5 antibody detected the B3GALT5 protein (arrow).





B3GALT5 Antibody (N-term) (Cat. #AP11135a) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

# B3GALT5 Antibody (N-term) - Background

## This gene is a member of the

beta-1,3-galactosyltransferase (beta3GalT) gene family. This family encodes type II membrane-bound glycoproteins with diverse enzymatic functions using different donor substrates (UDP-galactose and UDP-N-acetylglucosamine) and different acceptor sugars (N-acetylglucosamine, galactose, N-acetylgalactosamine). The beta3GaIT genes are distantly related to the Drosophila Brainiac gene and have the protein coding sequence contained in a single exon. The beta3GalT proteins also contain conserved sequences not found in the beta4GalT or alpha3GalT proteins. The carbohydrate chains synthesized by these enzymes are designated as type 1, whereas beta4GalT enzymes synthesize type 2 carbohydrate chains. The ratio of type 1:type 2 chains changes during embryogenesis. By sequence similarity, the beta3GaIT genes fall into at least two groups: beta3GalT4 and 4 other beta3GalT genes (beta3GalT1-3, beta3GalT5). This gene encodes the most probable candidate for synthesis of the type 1 Lewis antigens which are frequently found to be elevated in gastrointestinal and pancreatic cancers. The encoded protein is inactive with N-linked glycoproteins and functions in mucin glycosylation. Five transcript variants have been described which differ in the 5' UTR. All transcript variants encode an identical protein.

# **B3GALT5 Antibody (N-term) - References**

Hamshere, M.L., et al. Br J Psychiatry 195(1):23-29(2009) Lin, C.H., et al. Glycobiology 19(4):418-427(2009) Seko, A., et al. Tumour Biol. 30(1):43-50(2009) Mare, L., et al. J. Biol. Chem. 282(1):49-57(2007) Hu, Y.H., et al. BMC Genomics 7, 155 (2006) :