

## B3GNT1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP13200b

### Specification

# **B3GNT1 Antibody (C-term) - Product Information**

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Isotype Calculated MW Antigen Region WB, IHC-P,E <u>O43505</u> <u>O5EA01</u>, <u>NP\_006867.1</u> Human Bovine Rabbit Polyclonal Rabbit IgG 47119 366-394

## **B3GNT1** Antibody (C-term) - Additional Information

### Gene ID 11041

#### **Other Names**

Beta-1, 4-glucuronyltransferase 1, 241-, I-beta-1, 3-N-acetylglucosaminyltransferase, iGnT, N-acetyllactosaminide beta-1, 3-N-acetylglucosaminyltransferase, Poly-N-acetyllactosamine extension enzyme, UDP-GlcNAc:betaGal beta-1, 3-N-acetylglucosaminyltransferase 1, B3GNT1 (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=15685" target="\_blank">HGNC:15685</a>)

#### Target/Specificity

This B3GNT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 366-394 amino acids from the C-terminal region of human B3GNT1.

**Dilution** WB~~1:1000 IHC-P~~1:10~50

#### 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

B3GNT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **B3GNT1 Antibody (C-term) - Protein Information**



Name B4GA1

**Function** Beta-1,4-glucuronyltransferase involved in O-mannosylation of alpha-dystroglycan (DAG1) (PubMed:<u>19587235</u>, PubMed:<u>23359570</u>, PubMed:<u>25279699</u>, PubMed:<u>25279697</u>). Transfers a glucuronic acid (GlcA) residue onto a xylose (Xyl) acceptor to produce the glucuronyl-beta-1,4-xylose-beta disaccharide primer, which is further elongated by LARGE1, during synthesis of phosphorylated O-mannosyl glycan (PubMed:<u>25279699</u>, PubMed:<u>25279697</u>). Phosphorylated O-mannosyl glycan is a carbohydrate structure present in alpha-dystroglycan (DAG1), which is required for binding laminin G-like domain-containing extracellular proteins with high affinity (PubMed:<u>25279699</u>, PubMed:<u>25279697</u>). Required for axon guidance; via its function in O-mannosylation of alpha-dystroglycan (DAG1) (By similarity).

#### **Cellular Location**

Golgi apparatus membrane; Single-pass type II membrane protein. Note=Localizes near the trans-Golgi apparatus.

#### **Tissue Location**

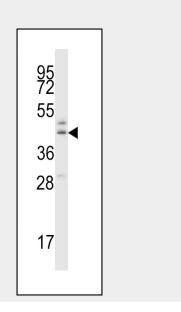
In the adult, highly expressed in heart, brain, skeletal muscle and kidney and to a lesser extent in placenta, pancreas, spleen, prostate, testis, ovary, small intestine and colon Very weak expression in lung, liver, thymus and peripheral blood leukocytes. In fetal highly expressed in brain and kidney and to a lesser extent in lung and liver.

## **B3GNT1 Antibody (C-term) - Protocols**

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

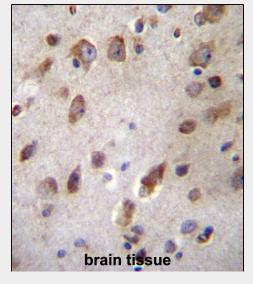
- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### B3GNT1 Antibody (C-term) - Images





B3GNT1 Antibody (C-term) (Cat. #AP13200b) western blot analysis in MDA-MB435 cell line lysates (35ug/lane). This demonstrates the B3GNT1 antibody detected the B3GNT1 protein (arrow).



B3GNT1 Antibody (C-term) (Cat. #AP13200b)immunohistochemistry analysis in formalin fixed and paraffin embedded human brain tissue followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of B3GNT1 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

# B3GNT1 Antibody (C-term) - Background

This gene encodes a member of the beta-1,3-N-acetylglucosaminyltransferase family. This enzyme is a type II transmembrane protein. It is essential for the synthesis of poly-N-acetyllactosamine, a determinant for the blood group i antigen.

### **B3GNT1 Antibody (C-term) - References**

Bao, X., et al. Proc. Natl. Acad. Sci. U.S.A. 106(29):12109-12114(2009) Lee, P.L., et al. Glycobiology 19(6):655-664(2009) Sasaki, K., et al. Proc. Natl. Acad. Sci. U.S.A. 94(26):14294-14299(1997)