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B3GNT1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13200b

Product Information

Application	WB, IHC-P, E
Primary Accession	O43505
Other Accession	Q5EA01, NP_006867.1
Reactivity	Human
Predicted	Bovine, Mouse, Rat, Canine, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32886
Calculated MW	47119
Antigen Region	366-394

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 (HGNC:15685)
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~~1:100~500 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	B3GNT1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	B4GA1

Function	Beta-1,4-glucuronyltransferase involved in O-mannosylation of alpha-dystroglycan (DAG1) (PubMed:19587235, PubMed:23359570, PubMed:25279697, PubMed:25279699). 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:25279697, PubMed:25279699). 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:25279697, PubMed:25279699). 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.

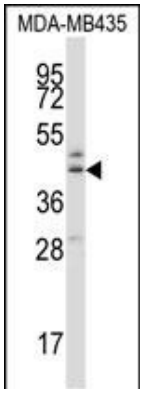
Background

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.

References

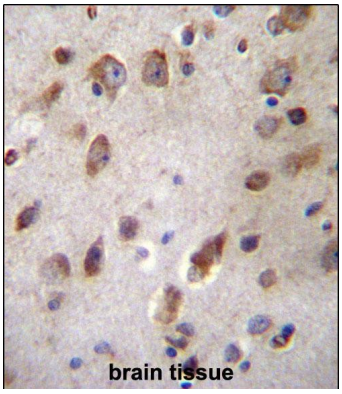
Bao, X., et al. Proc. Natl. Acad. Sci. U.S.A. 106(29):12109-12114(2009)
Lee, P.L., et al. Glycobiology 19(6):655-664(2009)
Sasaki, K., et al. Proc. Natl. Acad. Sci. U.S.A. 94(26):14294-14299(1997)

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.



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