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B3GNT5 Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9649c

Specification

B3GNT5 Antibody (Center) - Product Information

Application	**WB,E**
Primary Accession	Q9BYG0
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**44053**
Antigen Region	**118-145**

B3GNT5 Antibody (Center) - Additional Information

Gene ID 84002

Other Names
Lactosylceramide 1, 3-N-acetyl-beta-D-glucosaminyltransferase, Lactotriaosylceramide synthase, Lc(3)Cer synthase, Lc3 synthase, UDP-GlcNAc:beta-Gal beta-1, 3-N-acetylglucosaminyltransferase 5, BGnT-5, Beta-1, 3-Gn-T5, Beta-1, 3-N-acetylglucosaminyltransferase 5, Beta3Gn-T5, B3GNT5

Target/Specificity
This B3GNT5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 118-145 amino acids from the Central region of human B3GNT5.

Dilution
WB~~1:1000

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
B3GNT5 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

B3GNT5 Antibody (Center) - Protein Information

Name B3GNT5 (HGNC:15684)

Function Beta-1,3-N-acetylglucosaminyltransferase that plays a key role in the synthesis of lacto-

or neolacto-series carbohydrate chains on glycolipids, notably by participating in biosynthesis of HNK-1 and Lewis X carbohydrate structures. Has strong activity toward lactosylceramide (LacCer) and neolactotetraosylceramide (nLc(4)Cer; paragloboside), resulting in the synthesis of Lc(3)Cer and neolactopentaosylceramide (nLc(5)Cer), respectively. Probably plays a central role in regulating neolacto-series glycolipid synthesis during embryonic development.

Cellular Location
Golgi apparatus membrane; Single- pass type II membrane protein

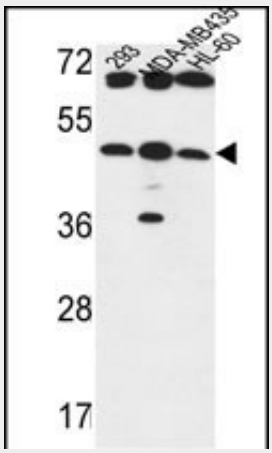
Tissue Location
Widely expressed. Highly expressed in lung, colon, placenta, testis, pituitary gland and cerebellum. Weakly expressed in brain, liver, spleen, lymph node and thymus

B3GNT5 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

B3GNT5 Antibody (Center) - Images



B3GNT5 Antibody (Center) (Cat. #AP9649c) western blot analysis in 293,MDA-MB435,HL-60 cell line lysates (35ug/lane).This demonstrates the B3GNT5 antibody detected the B3GNT5 protein (arrow).

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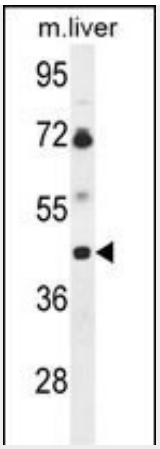

Western blot analysis of B3GNT5 Antibody (Center) (Cat. #AP9649c) in mouse liver tissue lysates (35ug/lane). B3GNT5 (arrow) was detected using the purified Pab.

B3GNT5 Antibody (Center) - Background

B3GNT5 is a member of the beta-1,3-N-acetylglucosaminyltransferase family. This enzyme is a type II membrane protein. It exhibits strong activity to transfer GlcNAc to glycolipid substrates and is identified as the most likely candidate for lactotriaosylceramide synthase. This enzyme is essential for the expression of Lewis X epitopes on glycolipids.

B3GNT5 Antibody (Center) - References

Marcos, N.T., et al. J. Clin. Invest. 118(6):2325-2336(2008)
Togayachi, A., et al. J. Biol. Chem. 276(25):22032-22040(2001)