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MGAT3 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP16735b

Specification

MGAT3 Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	Q09327
Other Accession	Q02527, Q10470, NP_002400.3, NP_001091740.1
Reactivity	**Human**
Predicted	**Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**61313**
Antigen Region	**426-454**

MGAT3 Antibody (C-term) - Additional Information

Gene ID 4248

Other Names
Beta-1, 4-mannosyl-glycoprotein 4-beta-N-acetylglucosaminyltransferase, N-glycosyl-oligosaccharide-glycoprotein N-acetylglucosaminyltransferase III, GNT-III, GlcNAc-T III, N-acetylglucosaminyltransferase III, MGAT3, GGNT3

Target/Specificity
This MGAT3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 426-454 amino acids from the C-terminal region of human MGAT3.

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
MGAT3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MGAT3 Antibody (C-term) - Protein Information

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Name MGAT3 (HGNC:7046)

Synonyms GGNT3

Function It is involved in the regulation of the biosynthesis and biological function of glycoprotein oligosaccharides. Catalyzes the addition of N-acetylglucosamine in beta 1-4 linkage to the beta-linked mannose of the trimannosyl core of N-linked sugar chains, called bisecting N-acetylglucosamine (GlcNAc). It is one of the most important enzymes involved in the regulation of the biosynthesis of glycoprotein oligosaccharides. The addition of this bisecting GlcNAc residue alters not only the composition, but also the conformation of the N-glycan. The introduction of the bisecting GlcNAc residue results in the suppression of further processing and elongation of N-glycans, precluding the formation of beta-1,6 GlcNAc branching, catalyzed by MGAT5 since it is unable to use the bisected oligosaccharide as a substrate (PubMed:19403558). Addition of bisecting N-acetylglucosamine to CDH1/E-cadherin modulates CDH1 cell membrane location (PubMed:19403558). Inhibits NeuAc-alpha-2,3-Gal-beta-1,4- GlcNAc- formation which modulates sialylation levels and plays a role in cell migration regulation (PubMed:26801611). In brain, addition of bisecting N-acetylglucosamine to BACE1 blocks its lysosomal targeting in response to oxidative stress and further degradation which increases its location to early endosome and the APP cleavage (By similarity).

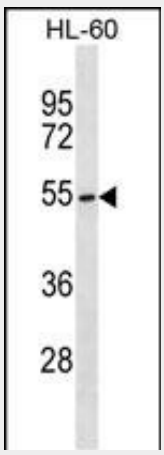
Cellular Location
Golgi apparatus membrane; Single-pass type II membrane protein

MGAT3 Antibody (C-term) - 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

MGAT3 Antibody (C-term) - Images



MGAT3 Antibody (C-term) (Cat. #AP16735b) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the MGAT3 antibody detected the MGAT3 protein (arrow).

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MGAT3 Antibody (C-term) - Background

There are believed to be over 100 different glycosyltransferases involved in the synthesis of protein-bound and lipid-bound oligosaccharides. The enzyme encoded by this gene transfers a GlcNAc residue to the beta-linked mannose of the trimannosyl core of N-linked oligosaccharides and produces a bisecting GlcNAc. Multiple alternatively spliced variants, encoding the same protein, have been identified.

MGAT3 Antibody (C-term) - References

Benson, V., et al. Int. Immunol. 22(3):167-177(2010)
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Pinho, S.S., et al. Hum. Mol. Genet. 18(14):2599-2608(2009)
Sato, Y., et al. J. Biol. Chem. 284(18):11873-11881(2009)
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