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MGAT5 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13815b

Specification

MGAT5 Antibody (C-term) - Product Information

Application	**WB, FC,E**
Primary Accession	Q09328
Other Accession	NP_002401.1
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**652-680**

MGAT5 Antibody (C-term) - Additional Information

Gene ID 4249

Other Names
Alpha-1, 6-mannosylglycoprotein 6-beta-N-acetylglucosaminyltransferase A, Alpha-mannoside beta-1, 6-N-acetylglucosaminyltransferase, GlcNAc-T V, GNT-V, Mannoside acetylglucosaminyltransferase 5, N-acetylglucosaminyl-transferase V, MGAT5, GGNT5

Target/Specificity
This MGAT5 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 652-680 amino acids from the C-terminal region of human MGAT5.

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
MGAT5 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

MGAT5 Antibody (C-term) - Protein Information

Name MGAT5

Synonyms GGNT5

Function Catalyzes the addition of N-acetylglucosamine (GlcNAc) in beta 1-6 linkage to the alpha-linked mannose of biantennary N-linked oligosaccharides (PubMed:10395745, PubMed:30140003). Catalyzes an important step in the biosynthesis of branched, complex-type N-glycans, such as those found on EGFR, TGFR (TGF-beta receptor) and CDH2 (PubMed:10395745, PubMed:22614033, PubMed:30140003). Via its role in the biosynthesis of complex N-glycans, plays an important role in the activation of cellular signaling pathways, reorganization of the actin cytoskeleton, cell-cell adhesion and cell migration. MGAT5-dependent EGFR N-glycosylation enhances the interaction between EGFR and LGALS3 and thereby prevents rapid EGFR endocytosis and prolongs EGFR signaling. Required for efficient interaction between TGFB1 and its receptor. Enhances activation of intracellular signaling pathways by several types of growth factors, including FGF2, PDGF, IGF, TGFB1 and EGF. MGAT5-dependent CDH2 N-glycosylation inhibits CDH2-mediated homotypic cell-cell adhesion and contributes to the regulation of downstream signaling pathways. Promotes cell migration. Contributes to the regulation of the inflammatory response. MGAT5-dependent TCR N- glycosylation enhances the interaction between TCR and LGALS3, limits agonist-induced TCR clustering, and thereby dampens TCR-mediated responses to antigens. Required for normal leukocyte evasation and accumulation at sites of inflammation (By similarity). Inhibits attachment of monocytes to the vascular endothelium and subsequent monocyte diapedesis (PubMed:22614033).

Cellular Location
Golgi apparatus membrane {ECO:0000250|UniProtKB:P97259}; Single-pass type II membrane protein

MGAT5 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

MGAT5 Antibody (C-term) - Images

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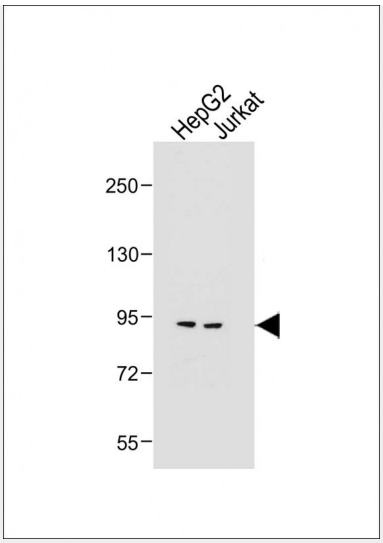
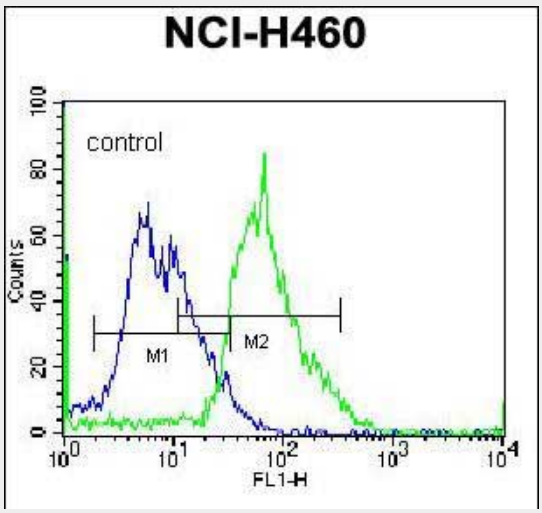


All lanes : Anti-MGAT5 Antibody (C-term) at 1:1000 dilution Lane 1: HepG2 whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 85 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



MGAT5 Antibody (C-term) (Cat. #AP13815b) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated donkey-anti-rabbit secondary antibodies were used for the analysis.

MGAT5 Antibody (C-term) - Background

This gene encodes mannosyl (alpha-1,6-)-glycoprotein beta-1,6-N-acetyl-glucosaminyltransferase, a glycosyltransferase involved in the synthesis of protein-bound and lipid-bound oligosaccharides. Alterations of the oligosaccharides on cell surface glycoproteins cause significant changes in the adhesive or migratory behavior of a cell. Increase in the encoded protein's activity may correlate with the progression of invasive malignancies.

MGAT5 Antibody (C-term) - References

Dick, D.M., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (6), 1179-1188 (2010) :

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Benson, V., et al. Int. Immunol. 22(3):167-177(2010)
Wang, C., et al. J. Cell. Biochem. 109(1):113-123(2010)
Ding, H., et al. Stroke 41(1):177-180(2010)