

**MGAT5 Antibody (C-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP13815b**

**Specification**

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**MGAT5 Antibody (C-term) - Product Information**

Application	<b>WB, FC,E</b>
Primary Accession	<a href="#">O09328</a>
Other Accession	<a href="#">NP_002401.1</a>
Reactivity	<b>Human</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Isotype	<b>Rabbit IgG</b>
Antigen Region	<b>652-680</b>

**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

**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 TGF $\beta$ 1 and its receptor. Enhances activation of intracellular signaling pathways by several types of growth factors, including FGF2, PDGF, IGF, TGF $\beta$ 1 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 evasion and accumulation at sites of inflammation (By similarity). Inhibits attachment of monocytes to the vascular endothelium and subsequent monocyte diapedesis (PubMed:[22614033](#)).

## Cellular Location

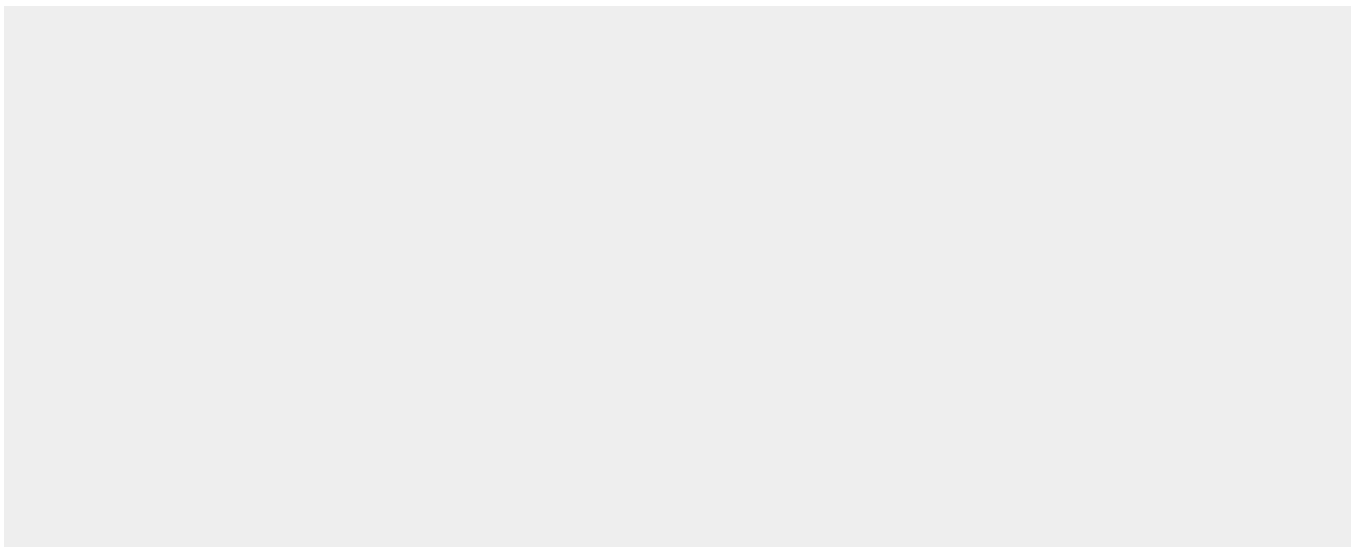
Golgi apparatus membrane {ECO:0000250|UniProtKB:P97259}; Single-pass type II membrane protein

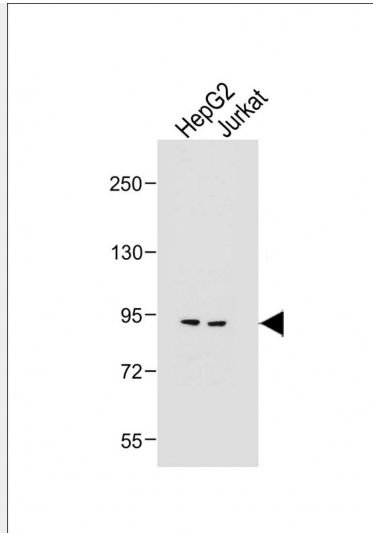
## MGAT5 Antibody (C-term) - Protocols

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

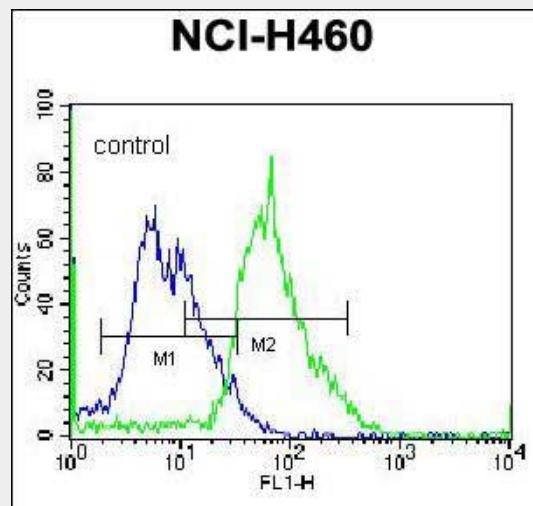
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## MGAT5 Antibody (C-term) - Images





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% NFDN/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) :

Brynedal, B., et al. J. Neuroimmunol. 220 (1-2), 120-124 (2010) :  
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)