

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

**Specification**

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

Application	WB, FC,E
Primary Accession	<a href="#">Q09328</a>
Other Accession	<a href="#">NP_002401.1</a>
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

**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 TGFβ1 and its receptor. Enhances activation of intracellular signaling pathways by several types of growth factors, including FGF2, PDGF, IGF, TGFβ1 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

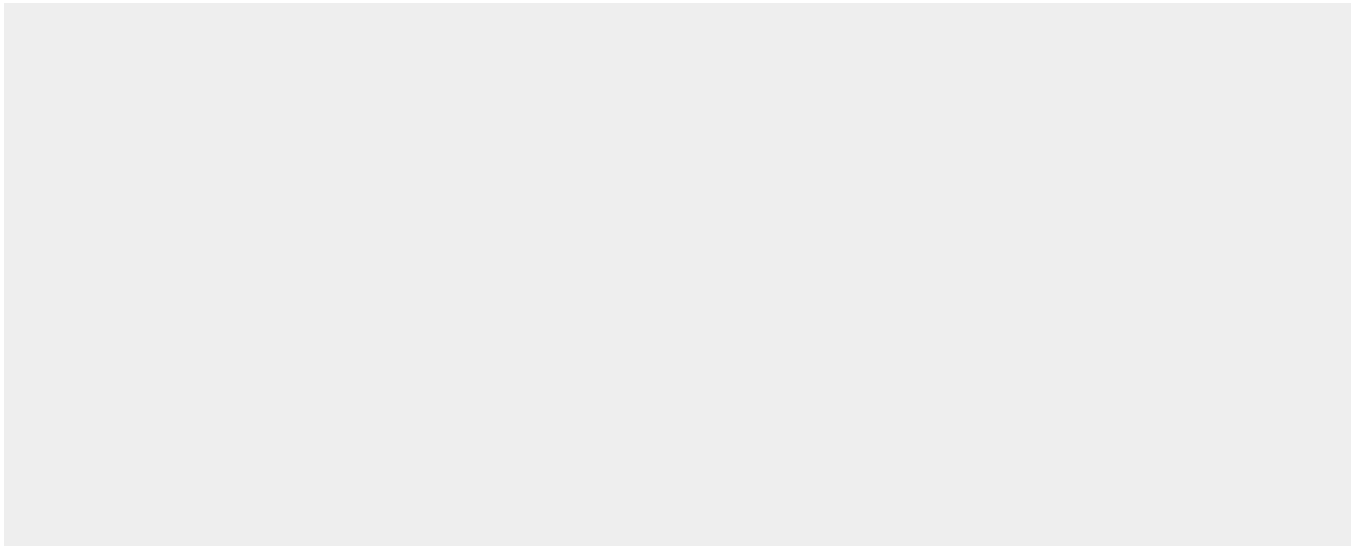
Golgi apparatus membrane {ECO:0000250|UniProtKB:P97259}; Single-pass type II membrane protein

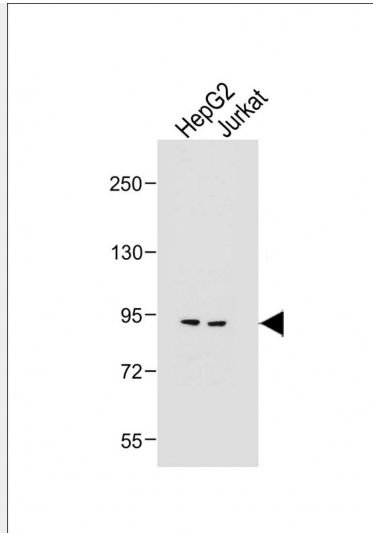
## MGAT5 Antibody (C-term) - Protocols

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

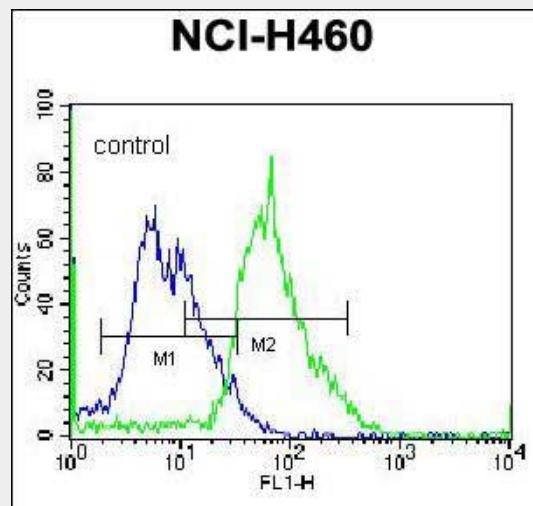
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## 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)