

MGAT5 Antibody (C-term) Blocking peptide
Synthetic peptide
Catalog # BP13815b**Specification**

MGAT5 Antibody (C-term) Blocking peptide - Product InformationPrimary Accession [Q09328](#)**MGAT5 Antibody (C-term) Blocking peptide - 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

The synthetic peptide sequence used to generate the antibody AP13815b was selected from the C-term region of MGAT5. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

MGAT5 Antibody (C-term) Blocking peptide - 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 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) Blocking peptide - Protocols

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

- [Blocking Peptides](#)

MGAT5 Antibody (C-term) Blocking peptide - Images

MGAT5 Antibody (C-term) Blocking peptide - 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) Blocking peptide - 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)