10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

GCNT1 Antibody (Center) Blocking Peptide

Synthetic peptide
Catalog # BP17151c

Specification

GCNT1 Antibody (Center) Blocking Peptide - Product Information

Primary Accession Q02742

GCNT1 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 2650

Other Names
Beta-1, 3-galactosyl-O-glycosyl-glycoprotein beta-1, 6-N-acetylglucosaminyltransferase, Core 2-branching enzyme, Core2-GlcNAc-transferase, C2GNT, Core 2 GNT, GCNT1, NACGT2

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.

GCNT1 Antibody (Center) Blocking Peptide - Protein Information

Name GCNT1

Synonyms NACGT2

Function
Glycosyltransferase that catalyzes the transfer of an N- acetylglucosamine (GlcNAc) moiety in beta1-6 linkage from UDP-GlcNAc onto mucin-type core 1 O-glycan to form the branched mucin-type core 2 O-glycan (PubMed:1329093, PubMed:23027862). The catalysis is metal ion- independent and occurs with inversion of the anomeric configuration of sugar donor (By similarity). Selectively involved in synthesis of mucin-type core 2 O-glycans that serve as scaffolds for the display of selectin ligand sialyl Lewis X epitope by myeloid cells, with an impact on homeostasis and recruitment to inflammatory sites (By similarity). Can also act on glycolipid substrates. Transfers GlcNAc moiety to GalGb4Cer globosides in a reaction step to the synthesis of stage- specific embryonic antigen 1 (SSEA-1) determinant (By similarity). Can use Galbeta1-3GalNAcalpha1- and Galbeta1-3GalNAcbeta1- oligosaccharide derivatives as acceptor substrates (By similarity).

Cellular Location
Golgi apparatus membrane; Single-pass type II membrane protein. Note=Also detected in the

trans-Golgi network

Tissue Location
Highly expressed in activated T-lymphocytes and myeloid cells

GCNT1 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

GCNT1 Antibody (Center) Blocking Peptide - Images

GCNT1 Antibody (Center) Blocking Peptide - Background

This gene is a member of thebeta-1,6-N-acetylglucosaminyltransferase gene family. It isessential to the formation of Gal beta 1-3(GlcNAc beta 1-6)GalNAcstructures and the core 2 O-glycan branch. The gene coding thisenzyme was originally mapped to 9q21, but was later localized to9q13. Multiple alternatively spliced variants, encoding the sameprotein, have been identified.

GCNT1 Antibody (Center) Blocking Peptide - References

Hatakeyama, S., et al. Int. J. Cancer 127(5):1052-1059(2010)Brockhausen, I., et al. Biochim. Biophys. Acta 1790(10):1244-1257(2009)St Hill, C.A., et al. BMC Cancer 9, 79 (2009) :Nagaraj, S., et al. Pancreas 37(3):321-327(2008)Julien, S., et al. J. Immunol. 179(9):5701-5710(2007)