

# **GCNT1** Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP17151c

# **Specification**

# **GCNT1** Antibody (Center) - Product Information

Application WB,E
Primary Accession Q02742

Other Accession NP 001091103.1, NP 001091102.1

Reactivity
Human
Host
Clonality
Polyclonal
Isotype
Calculated MW
Antigen Region
Human
Rabbit
Polyclonal
Rabbit IgG
49799
63-91

## GCNT1 Antibody (Center) - 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

## Target/Specificity

This GCNT1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 63-91 amino acids from the Central region of human GCNT1.

## **Dilution**

WB~~1:1000

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**

GCNT1 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

# **GCNT1** Antibody (Center) - 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**

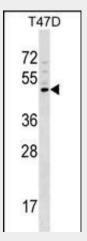
Highly expressed in activated T-lymphocytes and myeloid cells

# GCNT1 Antibody (Center) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# GCNT1 Antibody (Center) - Images



GCNT1 Antibody (Center) (Cat. #AP17151c) western blot analysis in T47D cell line lysates (35ug/lane). This demonstrates the GCNT1 antibody detected the GCNT1 protein (arrow).

## GCNT1 Antibody (Center) - Background





This gene is a member of the beta-1,6-N-acetylglucosaminyltransferase gene family. It is essential to the formation of Gal beta 1-3(GlcNAc beta 1-6)GalNAc structures and the core 2 O-glycan branch. The gene coding this enzyme was originally mapped to 9q21, but was later localized to 9q13. Multiple alternatively spliced variants, encoding the same protein, have been identified.

# **GCNT1** Antibody (Center) - 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)