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

GCNT1 Rabbit pAb

Catalog # AP99287

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q02742
Other Accession	Q02742
Reactivity	Rat, Human, Mouse
Predicted	Dog, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49799
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from Human GCNT1
Epitope Specificity	201-260/428
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the glycosyltransferase 14 family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	GCNT1 is expressed in a variety of cell types, including lymphocytes and mucin-producing cells. Specifically, GCNT1 expression in leukocytes regulates the synthesis of core 2 O-glycans that carry sialyl-Lewis x (sLex) oligosaccharides, which confer high affinity binding to Selectins. Downregulation of Selectin ligand expression levels has been shown to inhibit tissue infiltration. Therefore, GCNT1 represents a potential drug target for the treatment of inflammatory disorders and other pathologies involving Selectins.

Additional Information

Gene ID	2650
Other Names	GCNT1_HUMAN; GCNT1; Core 2 beta-1, 6-N-acetylglucosaminyltransferase (C2GlcNAcT); Core 2-branching enzyme; Core2-GlcNAc-transferase (C2GNT | Core 2 GNT); Leukocyte type core 2 beta-1, 6-N-acetylglucosaminyltransferase (C2GnT-L); 2.4.1.102; NACGT2; GCNT1_MOUSE; Core2-GlcNAc-transferase (C2GNT); glucosaminyl (N-acetyl) transferase 1; glucosaminyl (N-acetyl) transferase 1, core 2 (beta-1, 6-N-acetylglucosaminyltransferase); glucosaminyl (N-acetyl) transferase 1, core 2; core 2 beta1, 6 N-acetylglucosaminyltransferase-I; beta-1, 3-galactosyl-O-glycosyl-glycoprotein beta-1, 6-N--acetylglucosaminyltransferase
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.