

# GCNT1 Rabbit pAb

Catalog # AP99287

## Product Information

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| <b>Application</b>             | WB, IHC-P, IHC-F, IF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Primary Accession</b>       | <a href="#">Q02742</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Other Accession</b>         | <a href="#">Q02742</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Host</b>                    | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Clonality</b>               | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Calculated MW</b>           | 49799                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Physical State</b>          | Liquid                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Immunogen</b>               | KLH conjugated synthetic peptide derived from Human GCNT1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Epitope Specificity</b>     | 201-260/428                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Isotype</b>                 | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purity</b>                  | affinity purified by Protein A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Buffer</b>                  | 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>SIMILARITY</b>              | Belongs to the glycosyltransferase 14 family.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Important Note</b>          | This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Background Descriptions</b> | 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

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| <b>Gene ID</b>     | 2650                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Other Names</b> | 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 |
| <b>Dilution</b>    | WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Storage</b>     | 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

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| <b>Name</b>              | GCNT1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Synonyms</b>          | NACGT2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Function</b>          | <p>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:<a href="#">1329093</a>, PubMed:<a href="#">23027862</a>). 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).</p> |
| <b>Cellular Location</b> | Golgi apparatus membrane; Single-pass type II membrane protein. Note=Also detected in the trans-Golgi network                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Tissue Location</b>   | 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'.