

GCNT7 (N-16): sc-85572

BACKGROUND

Belonging to the glycosyltransferase 14 family, GCNT7, also known as β 1,3-galactosyl-O-glycosyl-glycoprotein β -1,6-N-acetylglucosaminyltransferase 7, is a 430 amino acid glycosyltransferase that is localized to the Golgi apparatus. Other members of this family include GCNT1, GCNT2, GCNT3, GCNT4 and GCNT6. GCNT1 has been shown to play an important regulatory role in the biosynthesis of mucin-type O-glycans, which serve as ligands in cell adhesion. 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 selectin proteins. Since downregulation of selectin ligand expression has been shown to inhibit tissue infiltration, glycosyltransferase 14 family members represent potential drug targets for the treatment of inflammatory disorders and other pathologies involving selectin proteins.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GCNT7 (human) mapping to 20q13.2; Gcnt7 (mouse) mapping to 2 H3.

SOURCE

GCNT7 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an N-terminal extracellular domain of GCNT7 of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-85572 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GCNT7 (N-16) is recommended for detection of GCNT7 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

GCNT7 (N-16) is also recommended for detection of GCNT7 in additional species, including equine, bovine, porcine and avian.

Suitable for use as control antibody for GCNT7 siRNA (h): sc-75121, GCNT7 siRNA (m): sc-145366, GCNT7 shRNA Plasmid (h): sc-75121-SH, GCNT7 shRNA Plasmid (m): sc-145366-SH, GCNT7 shRNA (h) Lentiviral Particles: sc-75121-V and GCNT7 shRNA (m) Lentiviral Particles: sc-145366-V.

Molecular Weight of GCNT7: 49 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.