

# GnT-II (K-17): sc-27274

## BACKGROUND

GnT-II (mannosyl ( $\alpha$ -1,6-)-glycoprotein  $\beta$ -1, 2-N-acetylgluco- saminyltransferase, GlcNAc-T II) is a Golgi enzyme that catalyzes the conversion of oligomannose into complex N-glycans and plays an important role in dietary fat absorption. Human MGAT2 transcript is abundant in the small intestine, liver, stomach, kidney, colon and white adipose tissue. Mouse MGAT2 transcript is abundant in the small intestine.

## REFERENCES

1. Tan, J., et al. 1995. The human UDP-N-acetylglucosamine:  $\alpha$ -6-D-mannoside- $\beta$ -1,2- N-acetylglucosaminyltransferase II gene (MGAT2). Cloning of genomic DNA, localization to chromosome 14q21, expression in insect cells and purification of the recombinant protein. *Eur. J. Biochem.* 231: 317-328.
2. Cao, J., et al. 2003. Cloning and functional characterization of a mouse intestinal acyl-CoA:monoacylglycerol acyltransferase, MGAT2. *J. Biol. Chem.* 278: 13860-13866.
3. Yen, C.L., et al. 2003. MGAT2, a monoacylglycerol acyltransferase expressed in the small intestine. *J. Biol. Chem.* 278: 18532-18537.
4. LocusLink Report (LocusID: 4247). <http://www.ncbi.nlm.nih.gov/LocusLink/>

## CHROMOSOMAL LOCATION

Genetic locus: MGAT2 (human) mapping to 14q21.3; Mgat2 (mouse) mapping to 7 E1.

## SOURCE

GnT-II (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GnT-II of human origin.

## PRODUCT

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

Blocking peptide available for competition studies, sc-27274 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

GnT-II (K-17) is recommended for detection of GnT-II 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).

GnT-II (K-17) is also recommended for detection of GnT-II in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GnT-II siRNA (h): sc-106777, GnT-II siRNA (m): sc-145662, GnT-II shRNA Plasmid (h): sc-106777-SH, GnT-II shRNA Plasmid (m): sc-145662-SH, GnT-II shRNA (h) Lentiviral Particles: sc-106777-V and GnT-II shRNA (m) Lentiviral Particles: sc-145662-V.

Molecular Weight of GnT-II: 56 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](http://www.scbt.com) or our catalog for detailed protocols and support products.