

GnT-V (T-19): sc-34140

BACKGROUND

UDP-N-acetylglucosamine: α mannoside β 1, 6 N-acetylglucosaminyltransferase, known as GnT-V, plays a pivotal role in the processing of N-linked glycoproteins and influences cancer progression and metastasis. Expression of GnT-V in the liver is enhanced during hepatocarcinogenesis, although it is not expressed in normal liver. Gene expression of GnT-V is regulated by a transcriptional factor, which is involved in angiogenesis and invasion of tumor cells. When the formation of the product of GnT-V, GlcNAc- β 1-6, is inhibited by overexpression of GnT-III, lung metastasis of melanoma cells is suppressed. Modification of glycoprotein receptors such as the receptors for epidermal growth factor and nerve growth factor by GnT-III sense transfection changes an intracellular signaling pathway, which may lead to a variety of biological alterations in tumor cells.

CHROMOSOMAL LOCATION

Genetic locus: MGAT5 (human) mapping to 2q21.2; Mgat5 (mouse) mapping to 1 E3.

SOURCE

GnT-V (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of GnT-V 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-34140 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

GnT-V (T-19) is recommended for detection of GnT-V of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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-V (T-19) is also recommended for detection of GnT-V in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for GnT-V siRNA (h): sc-40642, GnT-V siRNA (m): sc-40643, GnT-V shRNA Plasmid (h): sc-40642-SH, GnT-V shRNA Plasmid (m): sc-40643-SH, GnT-V shRNA (h) Lentiviral Particles: sc-40642-V and GnT-V shRNA (m) Lentiviral Particles: sc-40643-V.

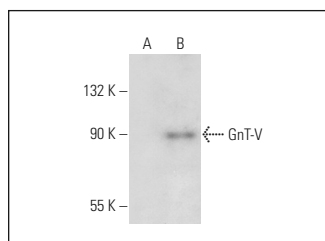
Molecular Weight of GnT-V: 85 kDa.

Positive Controls: GnT-V (h): 293T Lysate: sc-159554.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



GnT-V (T-19): sc-34140. Western blot analysis of GnT-V expression in non-transfected: sc-117752 (A) and human GnT-V transfected: sc-159554 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Wei, Y., et al. 2008. Down-regulation of β 1,4GalT V at protein level contributes to arsenic trioxide-induced glioma cell apoptosis. *Cancer Lett.* 267: 96-105.

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.


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Try **GnT-V (3E9): sc-293276**, our highly recommended monoclonal alternative to GnT-V (T-19).