SANTA CRUZ BIOTECHNOLOGY, INC.

GalNAc-T11 (F-16): sc-68497

BACKGROUND

The UDP-N-acetyl-α-D-galactosamine:polypeptide N-acetylgalactosaminyl-transferase (GalNAc-T) family of enzymes are substrate-specific proteins that catalyze the transfer of GalNAc (N-acetylgalactosaminyl) to serine and threonine residues of various proteins, thereby initiating mucin-type O-linked glycosylation in the Golgi apparatus. GalNAc-T11 (Polypeptide N-acetylgalactosaminyltransferase 11), also known as UDP-GalNAc:polypeptide N-acetylgalactosaminyltransferase 11, is a 608 amino acid protein that catalyzes glycosylation of Muc1, Muc4.1 and EA2, though it does not display enzymatic preference for erythropoitein. The N-terminal domain is involved in substrate binding and manganese coordination, while the C-terminal domain is involved in UDP-Gal binding and catalytic reaction. GalNAc-T11 is highly expressed in kidney tubules, though it is not expressed in glomeruli. There are two isoforms of GalNAc-T11 that are produced as a result of alternative splicing events.

REFERENCES

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3. Irimura, T., Denda, K., Iida, S., Takeuchi, H. and Kato, K. 1999. Diverse glycosylation of Muc1 and Muc2: potential significance in tumor immunity. J. Biochem. 126: 975-985.
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CHROMOSOMAL LOCATION

Genetic locus: GALNT11 (human) mapping to 7q36.1; Galnt11 (mouse) mapping to 5 A3.

STORAGE

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

SOURCE

GalNAc-T11 (F-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GalNAc-T11 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-68497 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GalNAc-T11 (F-16) is recommended for detection of GalNAc-T11 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).

Suitable for use as control antibody for GalNAc-T11 siRNA (h): sc-75086, GalNAc-T11 siRNA (m): sc-75087, GalNAc-T11 shRNA Plasmid (h): sc-75086-SH, GalNAc-T11 shRNA Plasmid (m): sc-75087-SH, GalNAc-T11 shRNA (h) Lentiviral Particles: sc-75086-V and GalNAc-T11 shRNA (m) Lentiviral Particles: sc-75087-V.

Molecular Weight of GalNAc-T11: 69 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.

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.