

GalNAc-T2 (C-17): sc-68511

BACKGROUND

GalNAc-T2 (UDP-N-acetyl- α -D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 2), also known as Protein-UDP acetylgalactosaminyltransferase 2, or GALNT2 is a widely expressed 571 amino acid protein belonging to the glycosyltransferase 2 family and GalNAc-transferase subfamily. GalNAc-T2 exists as both a single-pass type II membrane protein and secreted protein, which preferentially localizes to the *trans* and medial regions of the Golgi stack. Like other members of the GalNAc-transferase family, GalNAc-T2 is known to catalyze the transfer of N-acetyl galactosamine (GalNAc) to the hydroxyl group of a threonine or serine residue in the initial reaction of O-linked oligosaccharide biosynthesis. GalNAc-T2 contains two conserved domains: an N-terminal domain, termed domain A or GT1 motif, which likely contributes to substrate binding and manganese coordination, and a C-terminal domain, termed domain B or Gal/GalNAc-T motif, which likely plays a role in catalysis and UDP-Gal binding.

REFERENCES

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- Bennett, E.P., et al. 1998. Genomic organization and chromosomal localization of three members of the UDP-N-acetylgalactosamine: polypeptide N-acetylgalactosaminyltransferase family. *Glycobiology* 8: 547-555.
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CHROMOSOMAL LOCATION

Genetic locus: GALNT2 (human) mapping to 1q42.13; Galnt2 (mouse) mapping to 8 E2.

SOURCE

GalNAc-T2 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of GalNAc-T2 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-68511 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GalNAc-T2 (C-17) is recommended for detection of GalNAc-T2 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).

GalNAc-T2 (C-17) is also recommended for detection of GalNAc-T2 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for GalNAc-T2 siRNA (h): sc-75094, GalNAc-T2 siRNA (m): sc-75095, GalNAc-T2 shRNA Plasmid (h): sc-75094-SH, GalNAc-T2 shRNA Plasmid (m): sc-75095-SH, GalNAc-T2 shRNA (h) Lentiviral Particles: sc-75094-V and GalNAc-T2 shRNA (m) Lentiviral Particles: sc-75095-V.

Molecular Weight of GalNAc-T2: 65 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.