

# GalNAc-T14 (N-15): sc-68509

## BACKGROUND

The UDP-N-acetyl- $\alpha$ -D-galactosamine:polypeptide N-acetylgalactosaminyltransferase (GalNAc-T) family of enzymes are substrate-specific proteins that catalyze the transfer of GalNAc (N-acetylgalactosaminyl) to serine and threonine residues on various proteins, thereby initiating mucin-type O-linked glycosylation in the Golgi apparatus. GalNAc-T14 (UDP-N-acetyl- $\alpha$ -D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 14) is a 552 amino acid single-pass type II membrane protein that localizes to the Golgi apparatus and contains one ricin B-type lectin domain. Existing as multiple alternatively spliced isoforms that are highly expressed in fetal and adult kidney, GalNAc-T14 uses calcium and manganese as cofactors to catalyze the initial reaction in O-linked oligosaccharide biosynthesis, namely the transfer of GalNAc to select residues to target proteins.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: GALNT14 (human) mapping to 2p23.1; Galnt14 (mouse) mapping to 17 E2.

## SOURCE

GalNAc-T14 (N-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of GalNAc-T14 of human origin.

## RESEARCH USE

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

## 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-68509 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

GalNAc-T14 (N-15) is recommended for detection of GalNAc-T14 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-T14 (N-15) is also recommended for detection of GalNAc-T14 in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for GalNAc-T14 siRNA (h): sc-75092, GalNAc-T14 siRNA (m): sc-75093, GalNAc-T14 shRNA Plasmid (h): sc-75092-SH, GalNAc-T14 shRNA Plasmid (m): sc-75093-SH, GalNAc-T14 shRNA (h) Lentiviral Particles: sc-75092-V and GalNAc-T14 shRNA (m) Lentiviral Particles: sc-75093-V.

Molecular Weight (predicted) of GalNAc-T14: 64 kDa.

Molecular Weight (observed) of GalNAc-T14: 50 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<sup>™</sup> compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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<sup>™</sup> 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.