

GalNAc4ST-1 (C-20): sc-49012

BACKGROUND

Sulfotransferase enzymes catalyze the sulfate conjugation of many hormones, neurotransmitters, drugs and xenobiotic compounds. These cytosolic enzymes differ in their tissue distributions and substrate specificity, but the gene structure (number and length of exons) is similar among family members. GalNAc-4-sulfotransferase (GalNAc4ST-1), also designated carbohydrate sulfotransferase 8 (CHST8), is a member of a family of sulfotransferases that includes chondroitin-4-sulfotransferases-1–3, HNK-1 sulfotransferase and dermatan-4-sulfotransferase-1. The GalNAc4ST-1 protein displays 28% identity to chondroitin-4-sulfotransferase-1 (C4ST-1), 26% to chondroitin 4-sulfotransferase-2 (C4ST-2) and 23% identity to HNK-1ST. GalNAc4ST-1 transfers sulfate to the C-4 hydroxy group of nonreducing terminal GalNAc residues and shows higher expression in regions of the brain such as the pituitary and cerebellum.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CHST8 (human) mapping to 19q13.11; Chst8 (mouse) mapping to 7 B1.

SOURCE

GalNAc4ST-1 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of GalNAc4ST-1 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-49012 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

GalNAc4ST-1 (C-20) is recommended for detection of GalNAc4ST-1 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).

GalNAc4ST-1 (C-20) is also recommended for detection of GalNAc4ST-1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for GalNAc4ST-1 siRNA (h): sc-60691, GalNAc4ST-1 siRNA (m): sc-60692, GalNAc4ST-1 shRNA Plasmid (h): sc-60691-SH, GalNAc4ST-1 shRNA Plasmid (m): sc-60692-SH, GalNAc4ST-1 shRNA (h) Lentiviral Particles: sc-60691-V and GalNAc4ST-1 shRNA (m) Lentiviral Particles: sc-60692-V.

Molecular Weight of GalNAc4ST-1: 48 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.