

C4ST-3 (V-20): sc-68016



The Power to Question

BACKGROUND

Sulfotransferase enzymes catalyze the sulfate conjugation of many hormones, neurotransmitters, drugs and xenobiotic compounds. These enzymes differ in their tissue distributions and substrate specificities, although the gene structure (number and length of exons) is similar among family members. Chondroitin 4-O-sulfotransferase-3 (C4ST-3), also referred to as carbohydrate sulfotransferase 13 (CHST13), catalyzes the transfer of sulfate to the C-4 hydroxy group of β 1,4-linked N-acetylgalactosamine (GalNAc) internal residues in chondroitin. This sulfation is required for proper chondroitin sulfate localization, modulation of distinct signaling pathways and cartilage growth plate morphogenesis. C4ST-3 shares 45% identity with C4ST-1 but has a more restricted pattern of expression (liver and kidney) which suggests that they play different roles *in vivo*.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CHST13 (human) mapping to 3q21.3.

SOURCE

C4ST-3 (V-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C4ST-3 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-68016 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C4ST-3 (V-20) is recommended for detection of C4ST-3 of 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 C4ST-3 siRNA (h): sc-62114, C4ST-3 shRNA Plasmid (h): sc-62114-SH and C4ST-3 shRNA (h) Lentiviral Particles: sc-62114-V.

Molecular Weight of C4ST-3: 39 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.