SANTA CRUZ BIOTECHNOLOGY, INC.

C6ST-1 (A-15): sc-48971

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Sulfotransferase enzymes catalyze the sulfate conjugation of many hormones, neurotransmitters, drugs and xenobiotic compounds. These cytosolic enzymes differ in their tissue distribution and substrate specificities, although the gene structure (number and length of exons) is similar among family members. Sulfotransferases are primarily expressed in liver and adrenal tissues, where they add sulfate to steroids and bile acids. Chondroitin 6-sulfotransferase-1 (C6ST-1) is a 486 amino acid protein that localizes in the Golgi apparatus, where it sulfates both chondroitin and keratan sulfate. C6ST-1 is developmentally regulated in many different tissues, with expression continuing through adulthood in the spleen. When C6ST-1 expression is upregulated, the motility of Schwann cells that guide growing axons through both developmental and injured environments increases.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CHST3 (human) mapping to 10q22.1; Chst3 (mouse) mapping to 10 B4.

RESEARCH USE

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

SOURCE

C6ST-1 (A-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of C6ST-1 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-48971 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

C6ST-1 (A-15) is recommended for detection of C6ST-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).

C6ST-1 (A-15) is also recommended for detection of C6ST-1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for C6ST-1 siRNA (h): sc-60305, C6ST-1 siRNA (m): sc-60306, C6ST-1 shRNA Plasmid (h): sc-60305-SH, C6ST-1 shRNA Plasmid (m): sc-60306-SH, C6ST-1 shRNA (h) Lentiviral Particles: sc-60305-V and C6ST-1 shRNA (m) Lentiviral Particles: sc-60306-V.

Molecular Weight of C6ST-1: 56 kDa.

Positive Controls: HeLa nuclear extract: sc-2120 or mouse kidney extract: sc-2255.

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.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.