SANTA CRUZ BIOTECHNOLOGY, INC.

HNK-1ST (E-16): sc-49033

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 distributions and substrate specificities. HNK-1ST, also designated carbohydrate sulfotransferase 10 (CHST10), is a Golgi-associated sulfotransferase that functions in the biosynthesis of HNK-1, a neuronally expressed carbohydrate that harbors a sulfoglucuronyl residue. HNK-1ST and glucuronosyltransferase P (GLCATP) expression is necessary to form the HNK-1 carbohydrate epitope on NCAM, a cell adhesion molecule. HNK-1ST demonstrates prominent expression in adult and fetal brain and adult testis and ovary. The deduced 356 amino acid type II transmembrane protein contains 3 potential N-glycosylation sites and a conserved RDP sequence that is also present in other Golgi-resident sulfotransferases.

REFERENCES

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3. Kang, H.G., Evers, M.R., Xia, G., Baenziger, J.U. and Schachner, M. 2002. Molecular cloning and characterization of chondroitin-4-O-sulfotransferase-3. A novel member of the HNK-1 family of sulfotransferases. J. Biol. Chem. 277: 34766-34772.
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CHROMOSOMAL LOCATION

Genetic locus: CHST10 (human) mapping to 2q11.2; Chst10 (mouse) mapping to 1 B.

SOURCE

HNK-1ST (E-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HNK-1ST 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-49033 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HNK-1ST (E-16) is recommended for detection of HNK-1ST 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).

HNK-1ST (E-16) is also recommended for detection of HNK-1ST in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for HNK-1ST siRNA (h): sc-60794, HNK-1ST siRNA (m): sc-60795, HNK-1ST shRNA Plasmid (h): sc-60794-SH, HNK-1ST shRNA Plasmid (m): sc-60795-SH, HNK-1ST shRNA (h) Lentiviral Particles: sc-60794-V and HNK-1ST shRNA (m) Lentiviral Particles: sc-60795-V.

Molecular Weight of HNK-1ST: 42 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, Ramos cell lysate: sc-2216 or SK-N-MC cell lysate: sc-2237.

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.