**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 neurally 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**


**CHROMOSOMAL LOCATION**

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

**SOURCE**

HNK-1ST (E-20) 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-49034 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

**STORAGE**

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**APPLICATIONS**

HNK-1ST (E-20) is recommended for detection of HNK-1ST of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1,000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:300).

HNK-1ST (E-20) 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.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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