SANTA CRUZ BIOTECHNOLOGY, INC.

HS2ST1 (E-18): sc-103549

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

7BACKGROUND

Heparan sulfate structures, which are responsible for executing multiple biologic activities, are generated and regulated by heparan sulfate biosynthetic enzymes. HS2ST1 (heparan sulfate 2-O-sulfotransferase 1), also known as HS2ST, is a 356 amino acid single-pass type II membrane protein that localizes to the Golgi apparatus and belongs to the sulfotransferase 3 family. Expressed as multiple alternatively spliced isoforms, HS2ST1 functions to catalyze the transfer of sulfate groups to hexuronic acid residues within maturing heparan sulfate (HS), an event which is crucial for proper HS-related ligand binding and signaling processes. HS2ST1 is subject to post-translational N-glycosylation and, in addition to its role in HS function, may be involved in proper kidney formation.

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CHROMOSOMAL LOCATION

Genetic locus: HS2ST1 (human) mapping to 1p22.3; Hs2st1 (mouse) mapping to 3 H2.

SOURCE

HS2ST1 (E-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of HS2ST1 of human origin.

RESEARCH USE

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

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-103549 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HS2ST1 (E-18) is recommended for detection of HS2ST1 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).

Suitable for use as control antibody for HS2ST1 siRNA (h): sc-88331, HS2ST1 siRNA (m): sc-105540, HS2ST1 shRNA Plasmid (h): sc-88331-SH, HS2ST1 shRNA Plasmid (m): sc-105540-SH, HS2ST1 shRNA (h) Lentiviral Particles: sc-88331-V and HS2ST1 shRNA (m) Lentiviral Particles: sc-105540-V.

Molecular Weight (predicted) of HS2ST1: 42 kDa.

Molecular Weight (observed) of HS2ST1: 43-56 kDa.

Positive Controls: 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.

PROTOCOLS

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