HS2ST1 (H-170): sc-292203



The Boures to Overtion

BACKGROUND

Heparan sulfate structures, which are responsible for executing multiple biologic activities, are generated and regulated by heparan sulfate biosynthetic enzymes. HS2ST1 (heparan sulfate 2-0-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.

CHROMOSOMAL LOCATION

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

SOURCE

HS2ST1 (H-170) is a rabbit polyclonal antibody raised against amino acids 1-170 mapping at the N-terminus of HS2ST1 of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

HS2ST1 (H-170) 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), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], 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).

HS2ST1 (H-170) is also recommended for detection of HS2ST1 in additional species, including equine, canine, porcine and avian.

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.

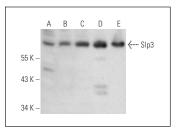
Molecular Weight (observed) of HS2ST1: 43-56 kDa.

Positive Controls: JAR cell lysate: sc-2276, HeLa whole cell lysate: sc-2200 or Jurkat whole cell lysate: sc-2204.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Slp3 (H-300): sc-292033. Western blot analysis of Slp3 expression in HeLa (**A**), U-2 OS (**B**), A-431 (**C**), JAR (**D**) and Jurkat (**E**) whole cell lysates.

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.



Try **HS2ST1 (G-10):** sc-376530, our highly recommended monoclonal alternative to HS2ST1 (H-170).

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