

HS2ST1 (Z-23): sc-130779

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-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.

REFERENCES

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- Rong, J., et al. 2000. Expression of heparan sulphate L-iduronyl 2-O-sulphotransferase in human kidney 293 cells results in increased D-glucuronyl 2-O-sulphation. *Biochem. J.* 346: 463-468.
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CHROMOSOMAL LOCATION

Genetic locus: HS2ST1 (human) mapping to 1p22.3.

SOURCE

HS2ST1 (Z-23) is a purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of HS2ST1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml 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 (Z-23) is recommended for detection of HS2ST1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

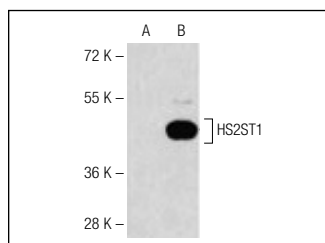
Suitable for use as control antibody for HS2ST1 siRNA (h): sc-88331, HS2ST1 shRNA Plasmid (h): sc-88331-SH and HS2ST1 shRNA (h) Lentiviral Particles: sc-88331-V.

Molecular Weight of HS2ST1: 42 kDa.

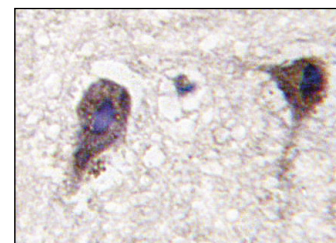
RECOMMENDED SECONDARY REAGENTS

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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



HS2ST1 (Z-23): sc-130779. Western blot analysis of HS2ST1 expression in non-transfected (A) and human HS2ST1 transfected (B) 293 cell lysates.



HS2ST1 (Z-23): sc-130779. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human brain tissue showing cytoplasmic localization.

RESEARCH USE

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

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Try **HS2ST1 (G-10): sc-376530**, our highly recommended monoclonal alternative to HS2ST1 (Z-23).