SANTA CRUZ BIOTECHNOLOGY, INC.

Sialin (H-90): sc-134856

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Sialin, also designated sodium/sialic acid cotransporter or membrane glycoprotein HP59, belongs to the major facilitator superfamily and the sodium/anion cotransporter family of proteins. Sialin acts as a solute translocator for anionic substances; in lysosomes it is a free sialic acid transporter. Sialin is a multi-pass membrane protein that localizes to the lysosome and is primarily detected in fetal lung and small intestine. It is also expressed in adult placenta, kidney and pancreas, and may be detected in colon, breast and ovary tumor endothelial cells as well. Defects in the SLC17A5 gene, which encodes the Sialin protein, can cause several disorders including Salla disease, an autosomal recessive sialic acid storage disease, as well as infantile sialic acid storage disorder (ISSD), a severe form of sialic acid storage disease in which affected newborns exhibit coarse features, visceromegaly (an enlargement of the internal organs) and a failure to thrive after birth.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: SLC17A5 (human) mapping to 6q13; Slc17a5 (mouse) mapping to 9 E1.

SOURCE

Sialin (H-90) is a rabbit polyclonal antibody raised against amino acids 21-110 mapping near the N-terminus of Sialin 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.

APPLICATIONS

Sialin (H-90) is recommended for detection of Slalin of mouse, rat and 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Sialin (H-90) is also recommended for detection of Slalin in additional species, including canine.

Suitable for use as control antibody for Sialin siRNA (h): sc-61545, Sialin siRNA (m): sc-61546, Sialin shRNA Plasmid (h): sc-61545-SH, Sialin shRNA Plasmid (m): sc-61546-SH, Sialin shRNA (h) Lentiviral Particles: sc-61545-V and Sialin shRNA (m) Lentiviral Particles: sc-61546-V.

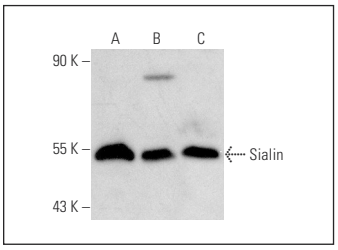
Molecular Weight of Sialin: 54.6 kDa.

Positive Controls: A549 cell lysate: sc-2413, HCT-116 whole cell lysate: sc-364175 or Caki-1 cell lysate: sc-2224.

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



Sialin (H-90): sc-134856. Western blot analysis of Sialin expression in A549 (**A**), HCT-116 (**B**) and Caki-1 (**C**) whole cell lysates.

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.