SANTA CRUZ BIOTECHNOLOGY, INC.

Syndecan-4 (H-140): sc-15350

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Syndecans are type I integral membrane proteoglycans that contain both chondroitin sulfate and heparan sulfate groups. Syndecans are involved in cell-extracellular matrix adhesion and growth factor binding. Syndecan-1 (SYND1, also called CD138) is an extracellular matrix receptor which binds to collagens, Fibronectin and Thrombospondin. Syndecan-1 and Syndecan-3 (also designated N-Syndecan) interact with MK (midkine), a growth/differentiation factor invloved in embryogenesis of the central nervous system. Syndecan-2 (also designated fibroglycan) is highly expressed at areas of high morphogenetic activity, such as epithelial-mesenchymal interfaces and the prechondrogenic and preosteogenic mesenchymal condensations. Syndecan-4 (also designated amphiglycan or ryudocan) functions cooperativley with integrins in the processes of cell spreading, focal adhesion assembly and Actin stress fiber assembly.

CHROMOSOMAL LOCATION

Genetic locus: SDC4 (human) mapping to 20q13.12; Sdc4 (mouse) mapping to 2 H3.

SOURCE

Syndecan-4 (H-140) is a rabbit polyclonal antibody raised against amino acids 1-140 mapping near the N-terminus of Syndecan-4 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

Syndecan-4 (H-140) is recommended for detection of Syndecan-4 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), immunohistochemistry (including paraffin-embeded 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 Syndecan-4 siRNA (h): sc-36588, Syndecan-4 siRNA (m): sc-36589, Syndecan-4 siRNA (r): sc-270178, Syndecan-4 shRNA Plasmid (h): sc-36588-SH, Syndecan-4 shRNA Plasmid (m): sc-36589-SH, Syndecan-4 shRNA Plasmid (r): sc-270178-SH, Syndecan-4 shRNA (h) Lentiviral Particles: sc-36588-V, Syndecan-4 shRNA (m) Lentiviral Particles: sc-36589-V and Syndecan-4 shRNA (r) Lentiviral Particles: sc-270178-V.

Molecular Weight of Syndecan-4: 24 kDa.

Positive Controls: A-673 cell lysate: sc-2414, Syndecan-4 (h): 293 Lysate: sc-176179 or HeLa whole cell lysate: sc-2200.

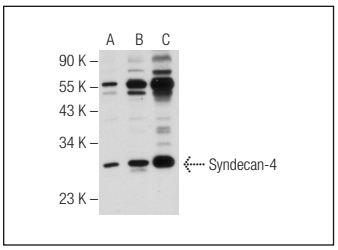
STORAGE

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

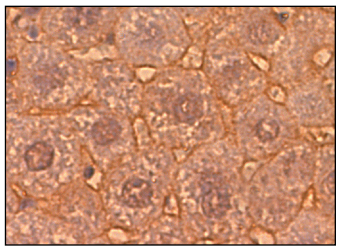
RESEARCH USE

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

DATA



Syndecan-4 (H-140): sc-15350. Western blot analysis of Syndecan-4 expression in non-transfected 293: sc-110760 (**A**), human Syndecan-4 transfected 293: sc-176179 (**B**) and A-673 (**C**) whole cell lysates.



Syndecan-4 (H-140): sc-15350. Immunoperoxidase staining of formalin fixed, paraffin-embedded mouse liver tissue showing membrane localization.

SELECT PRODUCT CITATIONS

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3. Schwaller, J., et al. 2007. Neutrophil-derived APRIL concentrated in tumor lesions by proteoglycans correlates with human B-cell lymphoma aggressiveness. Blood 109: 331-338.
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6. Chung, J.S., et al. 2009. The DC-HIL/syndecan-4 pathway inhibits human allogeneic T-cell responses. Eur. J. Immunol. 39: 965-974.
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