

Syndecan-1 (N-18): sc-7100

BACKGROUND

Syndecan-1 (SYND1), also designated CD138, is a type I integral membrane proteoglycan that contains both chondroitin sulfate and heparan sulfate groups. It is expressed in mouse on pre-B cells, immature B cells and plasma cells. Syndecan-1 is also found on the basolateral surfaces of epithelial cells, endothelial cells of sprouting capillaries and embryonic condensing mesenchymal cells. Syndecan-1 functions as an extracellular matrix receptor which binds to collagens, fibronectin and thrombospondin. It has been shown to co-localize with Actin-rich filaments and may act to link the cytoskeleton to the extracellular matrix.

CHROMOSOMAL LOCATION

Genetic locus: SDC1 (human) mapping to 2p24.1; Sdc1 (mouse) mapping to 12 A1.1.

SOURCE

Syndecan-1 (N-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Syndecan-1 of mouse origin.

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-7100 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

Syndecan-1 (N-18) is recommended for detection of Syndecan-1 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).

Suitable for use as control antibody for Syndecan-1 siRNA (h): sc-36587, Syndecan-1 siRNA (m): sc-36586, Syndecan-1 shRNA Plasmid (h): sc-36587-SH, Syndecan-1 shRNA Plasmid (m): sc-36586-SH, Syndecan-1 shRNA (h) Lentiviral Particles: sc-36587-V and Syndecan-1 shRNA (m) Lentiviral Particles: sc-36586-V.

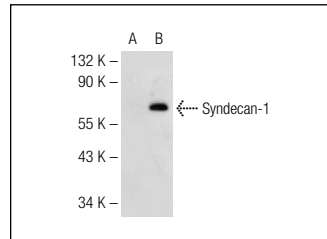
Molecular Weight of Syndecan-1: 85 kDa.

Positive Controls: Syndecan-1 (h2): 293T Lysate: sc-159118, HeLa whole cell lysate: sc-2200 or MCF7 whole cell lysate: sc-2206.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Syndecan-1 (N-18): sc-7100. Western blot analysis of Syndecan-1 expression in non-transfected: sc-117752 (A) and human Syndecan-1 transfected: sc-159118 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Adams, J.C., et al. 2001. A role for syndecan-1 in coupling fascin spike formation by thrombospondin 1. *J. Cell Biol.* 152: 1169-1182.
- Chung, M.C., et al. 2006. Secreted neutral metalloproteases of *Bacillus anthracis* as candidate pathogenic factors. *J. Biol. Chem.* 281: 31408-31418.
- Wen, J., et al. 2007. Syndecans are differentially expressed during the course of aortic aneurysm formation. *J. Vasc. Surg.* 46: 1014-1025.
- Wang, W., et al. 2008. Decoupled syndecan-1 mRNA and protein expression is differentially regulated by angiotensin II in macrophages. *J. Cell. Physiol.* 214: 750-756.
- Paris, S., et al. 2008. Opposing roles of syndecan-1 and syndecan-2 in polyethyleneimine-mediated gene delivery. *J. Biol. Chem.* 283: 7697-7704.
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Try **Syndecan-1 (A-6): sc-390791** or **Syndecan-1 (DL-101): sc-12765**, our highly recommended monoclonal alternatives to Syndecan-1 (N-18). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Syndecan-1 (A-6): sc-390791**.