

Syndecan-1 (C-20): sc-7099

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 (C-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-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-7099 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-7099 AC, 500 µg/0.25 ml agarose in 1 ml.

STORAGE

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

APPLICATIONS

Syndecan-1 (C-20) 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).

Syndecan-1 (C-20) is also recommended for detection of Syndecan-1 in additional species, including equine, canine, bovine and porcine.

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.

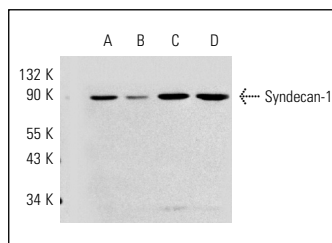
Molecular Weight of Syndecan-1: 85 kDa.

Positive Controls: SW480 cell lysate: sc-2219, HeLa whole cell lysate: sc-2200 or CCD-1064Sk cell lysate: sc-2263.

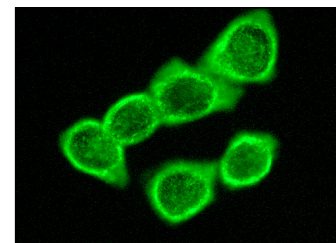
RESEARCH USE

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

DATA



Syndecan-1 (C-20): sc-7099. Western blot analysis of Syndecan-1 expression in HeLa (A), MCF7 (B), SW480 (C) and CCD-1064Sk (D) whole cell lysates.



Syndecan-1 (C-20): sc-7099. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane staining.

SELECT PRODUCT CITATIONS

1. Brockstedt, U., et al. 2002. Immunoreactivity to cell surface syndecans in cytoplasm and nucleus: tubulin-dependent rearrangements. *Exp. Cell Res.* 274: 235-245.
2. Itahana, Y., et al. 2003. Role of Id2 in the maintenance of a differentiated and noninvasive phenotype in breast cancer cells. *Cancer Res.* 63: 7098-7105.
3. Máthé, M., et al. 2006. Stromal syndecan-1 expression is an adverse prognostic factor in oral carcinomas. *Oral Oncol.* 42: 493-500.
4. Pakula, R., et al. 2007. Syndecan-1/CD147 association is essential for cyclophilin B-induced activation of p44/42 mitogen-activated protein kinases and promotion of cell adhesion and chemotaxis. *Glycobiology* 17: 492-503.
5. Saito, Y., et al. 2007. A peptide derived from tenascin-C induces β 1 integrin activation through syndecan-4. *J. Biol. Chem.* 282: 34929-34937.
6. Araki, E., et al. 2009. Clustering of syndecan-4 and integrin β 1 by laminin α -3 chain-derived peptide promotes keratinocyte migration. *Mol. Biol. Cell* 20: 3012-3024.
7. Olaku, V., et al. 2011. c-Met recruits ICAM-1 as a coreceptor to compensate for the loss of CD44 in Cd44 null mice. *Mol. Biol. Cell* 22: 2777-2786.
8. Schneider, C., et al. 2013. Targeting of syndecan-1 by micro-ribonucleic acid miR-10b modulates invasiveness of endometriotic cells via dysregulation of the proteolytic milieu and interleukin-6 secretion. *Fertil. Steril.* 99: 871-881.



Try **Syndecan-1 (A-6): sc-390791** or **Syndecan-1 (DL-101): sc-12765**, our highly recommended monoclonal alternatives to Syndecan-1 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Syndecan-1 (A-6): sc-390791**.