

Syndecan-4 (D-16): sc-9499

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) 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 involved 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 cooperatively 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 (D-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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.

Blocking peptide available for competition studies, sc-9499 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Syndecan-4 (D-16) 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), 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 Syndecan-4 siRNA (h): sc-36588, Syndecan-4 siRNA (m): sc-36589, Syndecan-4 shRNA Plasmid (h): sc-36588-SH, Syndecan-4 shRNA Plasmid (m): sc-36589-SH, Syndecan-4 shRNA (h) Lentiviral Particles: sc-36588-V and Syndecan-4 shRNA (m) Lentiviral Particles: sc-36589-V.

Molecular Weight of Syndecan-4: 24 kDa.

Positive Controls: A-673 cell lysate: sc-2414, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

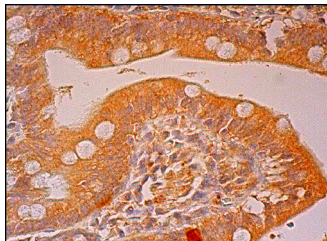
STORAGE

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 (D-16): sc-9499. Immunoperoxidase staining of formalin fixed, paraffin-embedded human duodenum tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Kaneider, N.C., et al. 2002. Syndecan-4 mediates antithrombin-induced chemotaxis of human peripheral blood lymphocytes and monocytes. *J. Cell Sci.* 115: 227-236.
2. Midwood, K.S., et al. 2004. Coregulation of fibronectin signaling and matrix contraction by tenascin-C and syndecan-4. *Mol. Biol. Cell* 15: 5670-5677.
3. Kaneider, N.C., et al. 2004. Heparan sulfate proteoglycans are involved in opiate receptor-mediated cell migration. *Biochemistry* 43: 237-244.
4. Feistritz, C., et al. 2004. Syndecan-4-dependent migration of human eosinophils. *Clin. Exp. Allergy* 34: 696-703.
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. Hallberg, G., et al. 2010. The expression of syndecan-1, syndecan-4 and decorin in healthy human breast tissue during the menstrual cycle. *Reprod. Biol. Endocrinol.* 8: 35.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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