

# Syndecan-3 (M-300): sc-15349

## 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 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: SDC3 (human) mapping to 1p35.2; Sdc3 (mouse) mapping to 4 D2.3.

## SOURCE

Syndecan-3 (M-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping near the N-terminus of Syndecan-3 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.

## 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-3 (M-300) is recommended for detection of Syndecan-3 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-3 siRNA (h): sc-41047, Syndecan-3 siRNA (m): sc-41048, Syndecan-3 shRNA Plasmid (h): sc-41047-SH, Syndecan-3 shRNA Plasmid (m): sc-41048-SH, Syndecan-3 shRNA (h) Lentiviral Particles: sc-41047-V and Syndecan-3 shRNA (m) Lentiviral Particles: sc-41048-V.

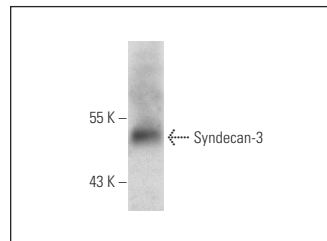
Molecular Weight of Syndecan-3: 50-55/120 kDa.

Positive Controls: Caki-1 cell lysate: sc-2224, SH-SY5Y cell lysate: sc-3812 or A549 cell lysate: sc-2413.

## 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



Syndecan-3 (M-300): sc-15349. Western blot analysis of Syndecan-3 expression in Caki-1 whole cell lysate.

## SELECT PRODUCT CITATIONS

- Okamoto, O., et al. 2003. Normal human keratinocytes bind to the  $\alpha$ 3LG4/5 domain of unprocessed laminin-5 through the receptor syndecan-1. *J. Biol. Chem.* 278: 44168-44177.
- Zhang, Y., et al. 2006. Mapping heparanase expression in the spinal cord of adult rats. *J. Comp. Neurol.* 494: 345-357.
- Iwabuchi, T., et al. 2006. Syndecan-4 dependent FGF stimulation of mouse vibrissae growth. *Mech. Dev.* 123: 831-841.
- Chung, J.S., et al. 2009. The DC-HIL/syndecan-4 pathway inhibits human allogeneic T-cell responses. *Eur. J. Immunol.* 39: 965-974.
- Rees-Milton, K.J. and Anastassiades, T.P. 2010. Immunoassay of low to moderately abundant anionic proteins utilizing selective immobilization to chitosan-coated plates. *Anal. Biochem.* 396: 310-312.
- Wu, Y.H., et al. 2012. Removal of syndecan-1 promotes TRAIL-induced apoptosis in myeloma cells. *J. Immunol.* 188: 2914-2921.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.



Try **Syndecan-3 (G-2): sc-398194**, our highly recommended monoclonal alternative to Syndecan-3 (M-300).