

# Syndecan-3 (D-19): sc-9496

## 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 (D-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Syndecan-3 of rat 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-9496 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## RESEARCH USE

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

## APPLICATIONS

Syndecan-3 (D-19) 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), 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).

Syndecan-3 (D-19) is also recommended for detection of Syndecan-3 in additional species, including equine, canine, bovine, porcine and avian.

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.

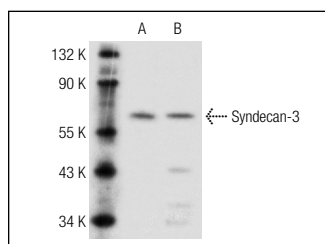
Molecular Weight of Syndecan-3: 50-55/120 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812 or A549 cell lysate: sc-2413.

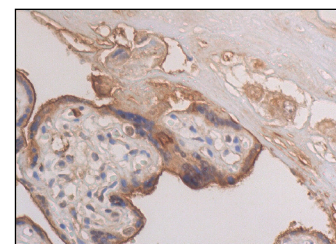
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



Syndecan-3 (D-19): sc-9496. Western blot analysis of Syndecan-3 expression in SH-SY5Y (A) and A549 (B) whole cell lysates.



Syndecan-3 (D-19): sc-9496. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic and membrane staining of trophoblastic cells.

## SELECT PRODUCT CITATIONS

- Carey, D.J. 1996. N-syndecan: structure and function of a transmembrane heparan sulfate proteoglycan. *Perspect. Dev. Neurobiol.* 3: 331-346.
- Tare, R.S., et al. 2002. Effects of targeted overexpression of pleiotrophin on postnatal bone development. *Biochem. Biophys. Res. Commun.* 298: 324-332.
- Paris, S., et al. 2008. Opposing roles of syndecan-1 and syndecan-2 in polyethyleneimine-mediated gene delivery. *J. Biol. Chem.* 283: 7697-7704.

## STORAGE

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

## PROTOCOLS

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