

Syndecan-2 (H-7): sc-365624

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 or HSPG) 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: SDC2 (human) mapping to 8q22.1.

SOURCE

Syndecan-2 (H-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 61-81 within an N-terminal extracellular domain of Syndecan-2 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Syndecan-2 (H-7) is available conjugated to agarose (sc-365624 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365624 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365624 PE), fluorescein (sc-365624 FITC), Alexa Fluor[®] 488 (sc-365624 AF488), Alexa Fluor[®] 546 (sc-365624 AF546), Alexa Fluor[®] 594 (sc-365624 AF594) or Alexa Fluor[®] 647 (sc-365624 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-365624 AF680) or Alexa Fluor[®] 790 (sc-365624 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365624 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

Syndecan-2 (H-7) is recommended for detection of Syndecan-2 of human origin by Western Blotting (starting dilution 1:100, 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-2 siRNA (h): sc-41045, Syndecan-2 shRNA Plasmid (h): sc-41045-SH and Syndecan-2 shRNA (h) Lentiviral Particles: sc-41045-V.

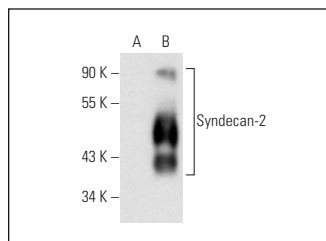
Molecular Weight of Syndecan-2: 22-48 kDa.

Positive Controls: Syndecan-2 (h): 293T Lysate: sc-116005.

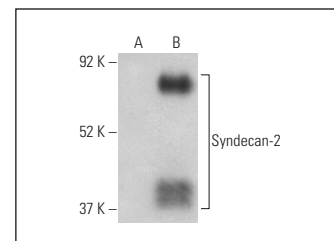
STORAGE

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

DATA



Syndecan-2 (H-7): sc-365624. Western blot analysis of Syndecan-2 expression in non-transfected: sc-117752 (A) and human Syndecan-2 transfected: sc-116005 (B) 293T whole cell lysates.



Syndecan-2 (H-7) HRP: sc-365624 HRP. Direct western blot analysis of Syndecan-2 expression in non-transfected: sc-117752 (A) and human Syndecan-2 transfected: sc-116005 (B) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

- Renga, B., et al. 2012. The HIV matrix protein p17 subverts nuclear receptors expression and induces a STAT1-dependent proinflammatory phenotype in monocytes. *PLoS ONE* 4: e35924.
- Renga, B., et al. 2014. The HIV matrix protein p17 promotes the activation of human hepatic stellate cells through interactions with CXCR2 and Syndecan-2. *PLoS ONE* 9: e94798.
- Renga, B., et al. 2015. The HIV matrix protein p17 induces hepatic lipid accumulation via modulation of nuclear receptor transcriptoma. *Sci. Rep.* 5: 15403.
- Delos, M., et al. 2018. Heparan sulfate 3-O-sulfotransferase 2 (HS3ST2) displays an unexpected subcellular localization in the plasma membrane. *Biochim. Biophys. Acta Gen. Subj.* 1862: 1644-1655.
- Costanzo, M., et al. 2020. Proteomics reveals that methylmalonyl-CoA mutase modulates cell architecture and increases susceptibility to stress. *Int. J. Mol. Sci.* 21: 4998.
- Nijmeijer, B.M., et al. 2020. Syndecan 4 upregulation on activated langerhans cells counteracts langerin restriction to facilitate hepatitis C virus transmission. *Front. Immunol.* 11: 503.
- Beauvais, D.M., et al. 2022. Plasma membrane proteoglycans syndecan-2 and syndecan-4 engage with EGFR and RON kinase to sustain carcinoma cell cycle progression. *J. Biol. Chem.* 298: 102029.

RESEARCH USE

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

PROTOCOLS

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

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