

Syndecan-1 (A-6): sc-390791

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.

SOURCE

Syndecan-1 (A-6) is a mouse monoclonal antibody raised against amino acids 82-256 of Syndecan-1 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-1 (A-6) is available conjugated to agarose (sc-390791 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390791 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-390791 PE), fluorescein (sc-390791 FITC), Alexa Fluor[®] 488 (sc-390791 AF488), Alexa Fluor[®] 546 (sc-390791 AF546), Alexa Fluor[®] 594 (sc-390791 AF594) or Alexa Fluor[®] 647 (sc-390791 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-390791 AF680) or Alexa Fluor[®] 790 (sc-390791 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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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 (A-6) is recommended for detection of Syndecan-1 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), 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-1 siRNA (h): sc-36587, Syndecan-1 shRNA Plasmid (h): sc-36587-SH and Syndecan-1 shRNA (h) Lentiviral Particles: sc-36587-V.

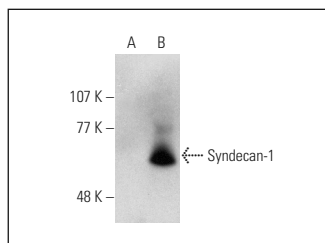
Molecular Weight of Syndecan-1: 85 kDa.

Positive Controls: Syndecan-1 (h2): 293T Lysate: sc-159118.

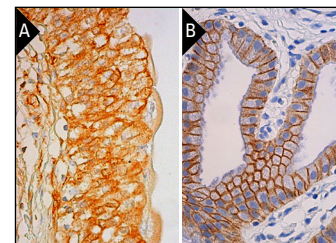
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz[®] Mounting Medium: sc-24941 or UltraCruz[®] Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Syndecan-1 (A-6) HRP: sc-390791 HRP. Direct western blot analysis of Syndecan-1 expression in non-transfected: sc-117752 (A) and human Syndecan-1 transfected: sc-159118 (B) 293T whole cell lysates.



Syndecan-1 (A-6): sc-390791. Immunoperoxidase staining of formalin fixed, paraffin-embedded human urinary bladder tissue showing membrane and cytoplasmic staining of urothelial cells (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing membrane staining of glandular cells (B).

SELECT PRODUCT CITATIONS

- Zeng, Y., et al. 2016. Sphingosine-1-phosphate induced epithelial-mesenchymal transition of hepatocellular carcinoma via an MMP-7/Syndecan-1/TGF-β autocrine loop. *Oncotarget* 7: 63324-63337.
- Zeng, Y., et al. 2017. Sphingosine 1-phosphate regulates proliferation, cell cycle and apoptosis of hepatocellular carcinoma cells via Syndecan-1. *Prog. Biophys. Mol. Biol.* 148: 32-38.
- Šemeláková, M., et al. 2018. The potential of hypericin and hyperforin for antiadhesion therapy to prevent metastasis of parental and oxaliplatin-resistant human adenocarcinoma cells (HT-29). *Anticancer Drugs* 29: 983-994.
- Arciniegas, E., et al. 2019. Galectin-1 and galectin-3 and their potential binding partners in the dermal thickening of keloid tissues. *Am. J. Dermatopathol.* 41: 193-204.
- Li, Y., et al. 2020. Scutellarein inhibits the development of colon cancer via Cdc4-mediated RAGE ubiquitination. *Int. J. Mol. Med.* 45: 1059-1072.

RESEARCH USE

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