

Nectin 4 (A-9): sc-515093

BACKGROUND

Homologous to the poliovirus receptor (PVR/CD155), the nectin immunoglobulin superfamily comprises four known isoforms (-1, -2, -3, and -4). The ectodomain of nectin family members comprises three Ig-like domains (V, C, C). Nectins localize at the adherens junctions (AJ) in epithelial and endothelial cells where they serve as adhesion molecules. Actin-based AJs play a role in mechanical adhesion, cellular morphogenesis and cellular differentiation. Nectin associates with the Actin cytoskeleton through its interaction with the Actin filament-binding protein afadin. Nectin 4 and afadin co-localize at cadherin-based adherens junctions in MDCKII epithelial cells. Nectin 4 and Nectin 3 share a common binding region in the V domain of Nectin 1 and thus compete for Nectin 1 binding. The Nectin 3/4 binding domain maps to the C-C'-C''-D β strands of the V domain of Nectin 1. Unlike other nectins, which are more widely expressed, Nectin 4 is mainly expressed in the placenta.

REFERENCES

1. Reymond, N., et al. 2001. Nectin 4/PRR4, a new afadin-associated member of the nectin family that *trans*-interacts with Nectin 1/PRR1 through V domain interaction. *J. Biol. Chem.* 276: 43205-43215.
2. Mizoguchi, A., et al. 2002. Nectin: an adhesion molecule involved in formation of synapses. *J. Cell Biol.* 156: 555-565.
3. Fabre, S., et al. 2002. Prominent role of the Ig-like V domain in *trans*-interactions of Nectins. Nectin 3 and Nectin 4 bind to the predicted C-C'-C''-D β -strands of the nectin1 V domain. *J. Biol. Chem.* 277: 27006-27013.
4. Peng, Y.F., et al. 2002. Restoration of E-cadherin-based cell-cell adhesion by overexpression of nectin in HSC-39 cells, a human signet ring cell gastric cancer cell line. *Oncogene* 21: 4108-4119.

CHROMOSOMAL LOCATION

Genetic locus: NECTIN4 (human) mapping to 1q23.3; Nectin4 (mouse) mapping to 1 H3.

SOURCE

Nectin 4 (A-9) is a mouse monoclonal antibody raised against amino acids 32-331 mapping within an N-terminal extracellular domain of Nectin 4 of human origin.

PRODUCT

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

Nectin 4 (A-9) is available conjugated to agarose (sc-515093 AC), 500 μ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-515093 HRP), 200 μ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515093 PE), fluorescein (sc-515093 FITC), Alexa Fluor® 488 (sc-515093 AF488), Alexa Fluor® 546 (sc-515093 AF546), Alexa Fluor® 594 (sc-515093 AF594) or Alexa Fluor® 647 (sc-515093 AF647), 200 μ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515093 AF680) or Alexa Fluor® 790 (sc-515093 AF790), 200 μ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

Nectin 4 (A-9) is recommended for detection of Nectin 4 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 Nectin 4 siRNA (h): sc-62669, Nectin 4 siRNA (m): sc-62670, Nectin 4 shRNA Plasmid (h): sc-62669-SH, Nectin 4 shRNA Plasmid (m): sc-62670-SH, Nectin 4 shRNA (h) Lentiviral Particles: sc-62669-V and Nectin 4 shRNA (m) Lentiviral Particles: sc-62670-V.

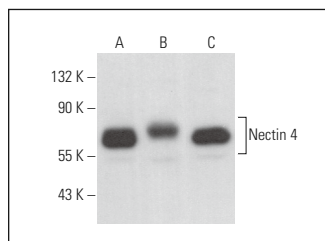
Molecular Weight of Nectin 4: 66 kDa.

Positive Controls: JAR cell lysate: sc-2276, RAW 264.7 whole cell lysate: sc-2211 or MIA PaCa-2 cell lysate: sc-2285.

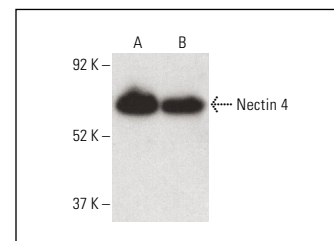
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



Nectin 4 (A-9): sc-515093. Western blot analysis of Nectin 4 expression in RAW 264.7 (A), 3T3-L1 (B) and PC-12 (C) whole cell lysates.



Nectin 4 (A-9) HRP: sc-515093 HRP. Direct western blot analysis of Nectin 4 expression in JAR (A) and MIA PaCa-2 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Katsuda, Y., et al. 2022. Small molecule-based detection of non-canonical RNA G-quadruplex structures that modulate protein translation. *Nucleic Acids Res.* 50: 8143-8153.

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.