

# Nectin 3 (N3.81.6): sc-69716

## BACKGROUND

Nectin is a  $\text{Ca}^{2+}$ -independent homophilic cell adhesion molecule that belongs to the immunoglobulin superfamily. Human Nectin is identical to the poliovirus receptor-related protein (PRR) and is identified to be the  $\alpha$  herpesvirus entry mediator. Nectin constitutes a family consisting of at least Nectin 1, 2 and 3. Nectin 2 and 3 are ubiquitously expressed, whereas Nectin 1 is abundantly expressed in brain. Nectin 3, also designated as PRR3, has three splicing variants: Nectin 3 $\alpha$ , 3 $\beta$  and 3 $\gamma$ . Nectin 3 is a transmembrane protein whose extracellular region contains three Ig-like domains. Nectin 3 $\alpha$  and 3 $\beta$ , but not Nectin 3 $\gamma$ , have a C-terminal conserved motif (E/A-X-Y-V). This motif interacts with the PDZ domain of the F-Actin-binding protein, afadin, through which it is linked to the Actin cytoskeleton. Nectin 3 $\alpha$  co-localizes with Nectin 2 at cadherin-based adherens junctions and interacts with afadin.

## REFERENCES

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2. Asakura, T., Nakanishi, H., Sakisaka, T., Takahashi, K., Mandai, K., Nishimura, M., Sasaki, T. and Takai, T. 1999. Similar and differential behavior between the nectin-afadin-ponsin and cadherin-catenin systems during the formation and disruption of the polarized junctional alignment in epithelial cells. *Genes Cells* 4: 573-581.
3. Kikyo, M., Matozaki, T., Kodama, A., Kawabe, H., Nakanishi, H. and Takai, Y. 2000. Cell-cell adhesion-mediated tyrosine phosphorylation of Nectin 2 $\delta$ , an immunoglobulin-like cell adhesion molecule at adherens junctions. *Oncogene* 19: 4022-4028.
4. Satoh-Horikawa, K., Nakanishi, H., Takahashi, K., Miyahara, M., Nishimura, M., Tachibana, K., Mizoguchi, A. and Takai, Y. 2000. Nectin 3, a new member of immunoglobulin-link cell adhesion molecules that shows homophilic and heterophilic cell-cell adhesion activities. *J. Biol. Chem.* 275: 10291-10299.
5. Reymond, N., Borg, J.P., Lecocq, E., Adalaide, J., Campadelli-Fiume, G., Dubreuil, P. and Lopez, M. 2000. Human Nectin 3/PRR3: a novel member of the PVR/PRR/Nectin family that interacts with afadin. *Gene* 255: 347-355.

## CHROMOSOMAL LOCATION

Genetic locus: PVRL3 (human) mapping to 3q13.

## SOURCE

Nectin 3 (N3.81.6) is a mouse monoclonal antibody raised against full-length recombinant Nectin 3 of human origin.

## PRODUCT

Each vial contains 200  $\mu\text{g}$  IgG<sub>2b</sub> kappa light chain in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

Nectin 3 (N3.81.6) is available conjugated to either phycoerythrin (sc-69716 PE) or fluorescein (sc-69716 FITC), 200  $\mu\text{g}/\text{ml}$ , for WB (RGB), IF, IHC(P) and FCM.

## APPLICATIONS

Nectin 3 (N3.81.6) is recommended for detection of Nectin 3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu\text{g}$  per 100-500  $\mu\text{g}$  of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and flow cytometry (1  $\mu\text{g}$  per  $1 \times 10^6$  cells); may cross-react with Nectin 3 of monkey origin.

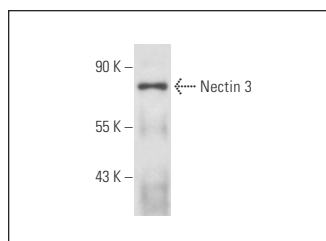
Suitable for use as control antibody for Nectin 3 siRNA (h): sc-36024, Nectin 3 shRNA Plasmid (h): sc-36024-SH and Nectin 3 shRNA (h) Lentiviral Particles: sc-36024-V.

Molecular Weight of Nectin 3: 83 kDa.

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:  
1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  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 $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  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



Western blot analysis of Nectin 3 expression in HeLa whole cell lysate immunoprecipitated with Nectin 3 (N3.81.6): sc-69716 and detected with Nectin 3 (H-245): sc-28637.

## SELECT PRODUCT CITATIONS

1. Jutz, S., Hennig, A., Paster, W., Asrak, Ö., Dijanovic, D., Kellner, F., Pickl, W.F., Huppa, J.B., Leitner, J. and Steinberger, P. 2017. A cellular platform for the evaluation of immune checkpoint molecules. *Oncotarget* 8: 64892-64906.

## 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.