

Nectin 1 (R1.302.12): sc-69718

BACKGROUND

Nectin is a 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 α 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 α , 3 β and 3 γ . Nectin 3 is a transmembrane protein whose extracellular region contains three Ig-like domains. Nectin 3 α and 3 β , but not Nectin 3 γ , 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 α co-localizes with Nectin 2 at cadherin-based adheren junctions and interacts with afadin.

CHROMOSOMAL LOCATION

Genetic locus: PVRL1 (human) mapping to 11q23.3.

SOURCE

Nectin 1 (R1.302.12) is a mouse monoclonal antibody raised against NIH/3T3 cells transfected with Nectin 1 of human origin.

PRODUCT

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

Nectin 1 (R1.302.12) is available conjugated to either phycoerythrin (sc-69718 PE) or fluorescein (sc-69718 FITC), 200 $\mu\text{g}/\text{ml}$, for WB (RGB), IF, IHC(P) and FCM.

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.

APPLICATIONS

Nectin 1 (R1.302.12) is recommended for detection of Nectin 1 of 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 flow cytometry (1 μg per 1×10^6 cells); non cross-reactive with Nectin 1 of mouse and rat origin; may cross-react with Nectin 1 of monkey origin.

Suitable for use as control antibody for Nectin 1 siRNA (h): sc-36022, Nectin 1 shRNA Plasmid (h): sc-36022-SH and Nectin 1 shRNA (h) Lentiviral Particles: sc-36022-V.

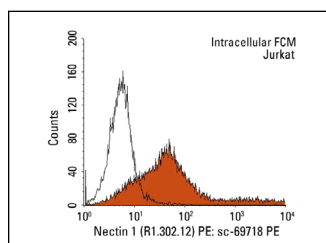
Molecular Weight of Nectin 1: 83 kDa.

Positive Controls: TF-1 cell lysate: sc-2412, IMR-32 cell lysate: sc-2409 or MEG-01 cell lysate: sc-2283.

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. 4) Immunohistochemistry: use m-IgG κ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



Nectin 1 (R1.302.12) PE: sc-69718 PE. FCM analysis of Jurkat cells. Black line histogram represents the isotype control, normal mouse IgG κ -PE: sc-2866.

SELECT PRODUCT CITATIONS

1. Uchida, H., et al. 2009. Generation of herpesvirus entry mediator (HVEM)-restricted herpes simplex virus type 1 mutant viruses: resistance of HVEM-expressing cells and identification of mutations that rescue Nectin 1 recognition. *J. Virol.* 83: 2951-2961.
2. Leddon, J.L., et al. 2015. Oncolytic HSV virotherapy in murine sarcomas differentially triggers an antitumor T-cell response in the absence of virus permissivity. *Mol. Ther. Oncolytics* 1: 14010.
3. Wang, P.Y., et al. 2016. Neuroblastomas vary widely in their sensitivities to herpes simplex virotherapy unrelated to virus receptors and susceptibility. *Gene Ther.* 23: 135-143.
4. Sauter, M.M. and Brandt, C.R. 2016. Primate neural retina upregulates IL-6 and IL-10 in response to a herpes simplex vector suggesting the presence of a pro-/anti-inflammatory axis. *Exp. Eye Res.* 148: 12-23.
5. Schwertner, B., et al. 2021. Nectin 1 expression correlates with the susceptibility of malignant melanoma to oncolytic herpes simplex virus *in vitro* and *in vivo*. *Cancers* 13: 3058.

CONJUGATES

See **Nectin 1 (CK6): sc-21722** for Nectin 1 antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.