

# Nectin 2 (N-20): sc-14799

## BACKGROUND

Nectin is a Ca<sup>2+</sup>-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 alphaherpesvirus entry mediator. Nectin constitutes a family consisting of at least Nectin 1, 2 and 3. Nectin 2 is ubiquitously expressed, with the highest levels of expression in some human neuronal cell lines, fibroblastic cells, keratinocytes and primary activated T lymphocytes. Each member has two or three splicing variants. Nectin 2, also designated as PRR2/HveB, has two splicing variants, Nectin 2 $\alpha$  (short form) and 2 $\delta$  (long form). Both Nectin 2 $\alpha$  and 2 $\delta$  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. The extracellular regions of the splicing variants are identical, but their transmembrane regions and cytoplasmic regions are unique. Nectin 2 mediates the entry of three mutant herpes simplex virus type 1 (HSV-1) strains that do not use HveA as co-receptor, but not wildtype HSV-1 strains. Nectin 2 also mediates the entry of HSV-2 and pseudorabies virus, but not bovine herpes virus type 1. Nectin 2 $\delta$  is tyrosine phosphorylated in response to cell-cell adhesion.

## CHROMOSOMAL LOCATION

Genetic locus: PVRL2 (human) mapping to 19q13.32; Pvr12 (mouse) mapping to 7 A3.

## SOURCE

Nectin 2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Nectin 2 of human origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-14799 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Nectin 2 (N-20) is recommended for detection of Nectin 2 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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).

Nectin 2 (N-20) is also recommended for detection of Nectin 2 in additional species, including equine and bovine.

Suitable for use as control antibody for Nectin 2 siRNA (h): sc-43169, Nectin 2 siRNA (m): sc-43170, Nectin 2 shRNA Plasmid (h): sc-43169-SH, Nectin 2 shRNA Plasmid (m): sc-43170-SH, Nectin 2 shRNA (h) Lentiviral Particles: sc-43169-V and Nectin 2 shRNA (m) Lentiviral Particles: sc-43170-V.

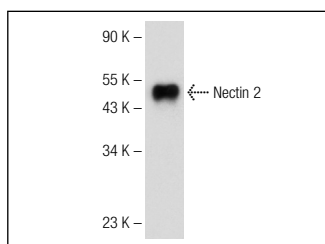
Molecular Weight of Nectin 2 $\alpha$ : 60 kDa.

Molecular Weight of Nectin 2 $\delta$ : 65 kDa.

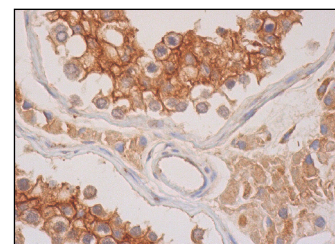
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



Nectin 2 (N-20): sc-14799. Western blot analysis of human recombinant Nectin 2.



Nectin 2 Antibody (N-20): sc-14799. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing membrane and cytoplasmic staining of cells in seminiferous ducts and cytoplasmic staining of Leydig cells.

## SELECT PRODUCT CITATIONS

1. Tsuzaka, K., et al. 2006. DNA microarray gene expression profile of T cells with the splice variants of TCR $\zeta$  mRNA observed in systemic lupus erythematosus. *J. Immunol.* 176: 949-956.
2. Prod'homme, V., et al. 2010. Human cytomegalovirus UL141 promotes efficient downregulation of the natural killer cell activating ligand CD112. *J. Gen. Virol.* 91: 2034-2039.
3. Maekawa, M., et al. 2011. Localisation of RA175 (Cadm1), a cell adhesion molecule of the immunoglobulin superfamily, in the mouse testis, and analysis of male infertility in the RA175-deficient mouse. *Andrologia* 43: 180-188.

## 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.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.