**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 has been identified as the α-herpesvirus entry mediator. Nectin constitutes a family consisting of at least Nectin 1, 2 and 3; each member has two or three splicing variants. Nectin 2, also designated PRR2/HerV, is ubiquitously expressed, with the highest levels of expression in some human neuronal cell lines, fibroblastic cells, keratinocytes and primary activated T lymphocytes. Nectin 2 has two splicing variants, Nectin 2α (short form) and 2β (long form). Both Nectin 2α and 2β 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 2β is tyrosine phosphorylated in response to cell-cell adhesion.

**CHROMOSOMAL LOCATION**

Genetic locus: PVRL2 (human) mapping to 19q13.32; Pvlr2 (mouse) mapping to 7 A3.

**SOURCE**

Nectin 2 (D-11) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 23-56 near the N-terminus of Nectin 2 of human origin.

**PRODUCT**

Each vial contains 200 μg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Nectin 2 (D-11) is available conjugated to agarose (sc-373715 AC), 500 μg/0.25 ml agarose in 1 ml, IP; to HRP (sc-373715 HRP), 200 μg/ml, for WB, IHC, and ELISA; to either phycoerythrin (sc-373715 PE), fluorescein (sc-373715 FITC), Alexa Fluor® 488 (sc-373715 AF488), Alexa Fluor® 546 (sc-373715 AF546), Alexa Fluor® 594 (sc-373715 AF594) or Alexa Fluor® 647 (sc-373715 AF647), 200 μg/ml, for WB (RGB), IF, IHC, and FCM; and to either Alexa Fluor® 680 (sc-373715 AF680) or Alexa Fluor® 790 (sc-373715 AF790), 200 μg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-373715 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**STORAGE**

Store at 4°C, **“DO NOT FREEZE”**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

**APPLICATIONS**

Nectin 2 (D-11) is recommended for detection of Nectin 2 of mouse, rat and 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 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.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:
1. Western Blotting: use m-IgGx BP-HRP: sc-516102 or m-IgGx 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.

**DATA**

Molecular Weight of Nectin 2α: 60 kDa.

Molecular Weight of Nectin 2β: 65 kDa.

Positive Controls: ECV304 cell lysate: sc-2269.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

Alexa Fluor® is a trademark of Molecular Probes, Inc., Oregon, USA

**ACKNOWLEDGMENTS**

See our website at www.scbt.com for detailed protocols and support products.