SANTA CRUZ BIOTECHNOLOGY, INC.

Nectin 2 (E-1): sc-271236

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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/HveB, is ubquitously 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 2δ (long form). Both Nectin 2α and 2δ 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 2δ is tyrosine phosphorylated in response to cell-cell adhesion.

REFERENCES

1. Lopez, M., et al. 1995. Complementary DNA characterization and chromosomal localization of a human gene related to the poliovirus receptor-encoding gene. Gene 155: 261-265.
2. Eberle, F., et al. 1995. The human PRR2 gene, related to the human poliovirus receptor gene (PVR), is the true homolog of the murine MPH gene. Gene 159: 267-272.

CHROMOSOMAL LOCATION

Genetic locus: NECTIN2 (human) mapping to 19q13.32; Nectin2 (mouse) mapping to 7 A3.

SOURCE

Nectin 2 (E-1) is a mouse monoclonal antibody raised against amino acids 28-135 mapping near the N-terminus of Nectin 2 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Nectin 2 (E-1) is available conjugated to agarose (sc-271236 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-271236 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-271236 PE), fluorescein (sc-271236 FITC), Alexa Fluor® 488 (sc-271236 AF488), Alexa Fluor® 546 (sc-271236 AF546), Alexa Fluor® 594 (sc-271236 AF594) or Alexa Fluor® 647 (sc-271236 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-271236 AF680) or Alexa Fluor® 790 (sc-271236 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

Nectin 2 (E-1) 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).

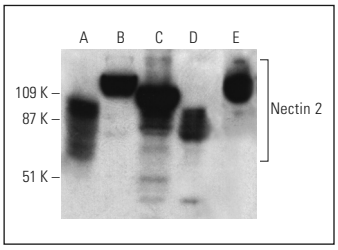
Suitable for use as control antibody for Nectin 2 siRNA (h): sc-43169, Nectin 2 siRNA (m): sc-43170, Nectin 2 shRNA Plasmid (h): sc-43169-SH, Nectin 2 shRNA Plasmid (m): sc-43170-SH, Nectin 2 shRNA (h) Lentiviral Particles: sc-43169-V and Nectin 2 shRNA (m) Lentiviral Particles: sc-43170-V.

Molecular Weight of Nectin 2α: 60 kDa.

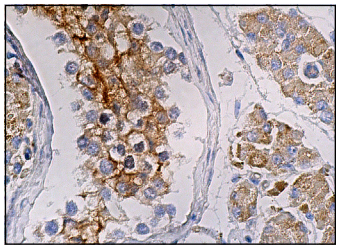
Molecular Weight of Nectin 2δ: 65 kDa.

Positive Controls: Caco-2 cell lysate: sc-2262, BYDP whole cell lysate: sc-364368 or T98G cell lysate: sc-2294.

DATA



Nectin 2 (E-1) HRP: sc-271236 HRP. Direct western blot analysis of Nectin 2 expression in Caco-2 (**A**), Neuro-2A (**B**), T98G (**C**), HeLa (**D**) and BYDP (**E**) whole cell lysates.



Nectin 2 (E-1) : sc-271236. Immunoperoxidase staining of formalin fixed, paraffin-embedded human testis tissue showing membrane and cytoplasmic staining in cells in seminiferous ducts and cytoplasmic staining in Leydig cells.

SELECT PRODUCT CITATIONS

1. Russo, E., et al. 2021. CD112 regulates angiogenesis and T cell entry into the spleen. Cells 10: 169.
2. Ogawa, H., et al. 2022. Nectin 2 acts as a viral entry mediated molecule that binds to human herpesvirus 6B glycoprotein B. Viruses 14: 160.

RESEARCH USE

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

PROTOCOLS

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