

Nectin 1 (H-62): sc-28639

BACKGROUND

Nectin is a Ca²⁺-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 the brain. Nectin 1 exists as Nectin 1 α and 1 β /HIgR, produced by alternative splicing. The cytoplasmic regions of Nectin 1 α , but not Nectin 1 β /HIgR, 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 1, also designated HveC/PRR1, allows the entry of herpes simplex virus type 1 (HSV-1) and HSV-2 into mammalian cells. The interaction of virus envelope glycoprotein D (gD) with Nectin 1 is an essential step in the process leading to membrane fusion; the gD binding site is located at the first Ig-like domain of Nectin 1. Both the transinteraction of Nectin and the interaction of Nectin with afadin are necessary for their co-localization with E-cadherin and catenins at adherens junctions.

CHROMOSOMAL LOCATION

Genetic locus: PVRL1 (human) mapping to 11q23.3; Pvr1 (mouse) mapping to 9 A5.1.

SOURCE

Nectin 1 (H-62) is a rabbit polyclonal antibody raised against amino acids 451-512 mapping near the C-terminus of Nectin 1 of human origin.

PRODUCT

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

APPLICATIONS

Nectin 1 (H-62) is recommended for detection of Nectin 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (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 1 (H-62) is also recommended for detection of Nectin 1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Nectin 1 siRNA (h): sc-36022, Nectin 1 siRNA (m): sc-36023, Nectin 1 shRNA Plasmid (h): sc-36022-SH, Nectin 1 shRNA Plasmid (m): sc-36023-SH, Nectin 1 shRNA (h) Lentiviral Particles: sc-36022-V and Nectin 1 shRNA (m) Lentiviral Particles: sc-36023-V.

Molecular Weight of Nectin 1: 87 kDa.

Positive Controls: mouse brain extract: sc-2253, rat brain extract: sc-2392 or IMR-32 cell lysate: sc-2409.

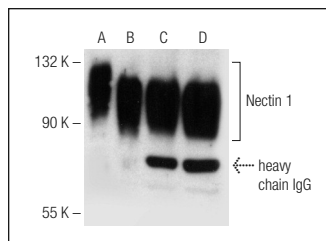
RESEARCH USE

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

STORAGE

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

DATA



Nectin 1 (H-62): sc-28639. Western blot analysis of Nectin 1 expression in IMR-32 whole cell lysate (A) and human brain (B), mouse brain (C) and rat brain (D) tissue extracts.

SELECT PRODUCT CITATIONS

- Barron, M.J., et al. 2008. The cell adhesion molecule Nectin 1 is critical for normal enamel formation in mice. *Hum. Mol. Genet.* 17: 3509-3520.
- Yoshida, K., et al. 2008. Microphthalmia and lack of vitreous body in transgenic mice expressing the first immunoglobulin-like domain of Nectin 1. *Graefes Arch. Clin. Exp. Ophthalmol.* 246: 543-549.
- 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.
- Tomioka, Y., et al. 2009. Fusion protein consisting of the first immunoglobulin-like domain of porcine Nectin 1 and Fc portion of human IgG₁ provides a marked resistance against pseudorabies virus infection to transgenic mice. *Microbiol. Immunol.* 53: 8-15.
- Maddala, R., et al. 2011. Rac1 GTPase-deficient mouse lens exhibits defects in shape, suture formation, fiber cell migration and survival. *Dev. Biol.* 360: 30-43.

PROTOCOLS

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



Try **Nectin 1 (CK6): sc-21722** or **Nectin 1 (F-10): sc-271063**, our highly recommended monoclonal alternatives to Nectin 1 (H-62). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Nectin 1 (CK6): sc-21722**.