

Nectin 2 (m): 293T Lysate: sc-127214

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

REFERENCES

1. Lopez, M., Eberle, F., Mattei, M.G., Gabert, J., Birg, F., Bardin, F., Maroc, C. and Dubreuil, P. 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., Durbreuil, P., Mattei, M.G., Devillard, E. and Lopez, M. 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.
3. Warner, M.S., Geraghty, R.J., Martinez, W.M., Montgomery, R.I., Whiteck, J.C., Xu, R., Eisenberg, R.J., Cohen, G.H. and Spear, P.G. 1998. A cell surface protein with herpesvirus entry activity (HveB) confers susceptibility to infection by mutants of herpes simplex virus type-1, herpes simplex virus type-2 and pseudorabies virus. *Virology* 246: 179-189.
4. Satoh-Horikawa, K., Nakanishi, H., Takahashi, K., Miyahara, M., Nishimura, M., Tachibana, K., Mizoguchi, A. and Takai, Y. 2000. Nectin 3, a new member of immunoglobulin-like cell adhesion molecules that shows homophilic and heterophilic cell-cell adhesion activities. *J. Biol. Chem.* 275: 10291-10299.
5. Kikyo, M., Matozaki, T., Kodama, A., Kawabe, H., Nakanishi, H. and Takai, Y. 2000. Cell-cell adhesion-mediated tyrosine phosphorylation of Nectin 2 δ , an immunoglobulin-like cell adhesion molecule at adherens junctions. *Oncogene* 19: 4022-4028.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Pvr12 (mouse) mapping to 7 A3.

PRODUCT

Nectin 2 (m): 293T Lysate represents a lysate of mouse Nectin 2 transfected 293T cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

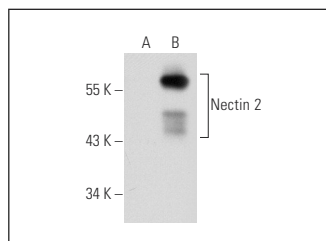
APPLICATIONS

Nectin 2 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive Nectin 2 antibodies. Recommended use: 10-20 μl per lane.

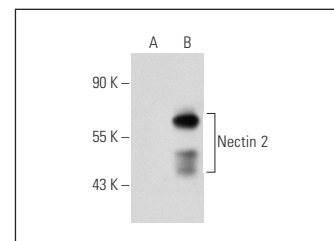
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Nectin 2 (6A606): sc-71660 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse Nectin 2 expression in Nectin 2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

DATA



Nectin 2 (6A606): sc-71660. Western blot analysis of Nectin 2 expression in non-transfected: sc-117752 (A) and mouse Nectin 2 transfected: sc-127214 (B) 293T whole cell lysates.



Nectin 2 (502-57): sc-52708. Western blot analysis of Nectin 2 expression in non-transfected: sc-117752 (A) and mouse Nectin 2 transfected: sc-127214 (B) 293T whole cell lysates.

RESEARCH USE

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