

MONOCLONAL ANTIBODY

Anti-Nectin-1 (Mouse) mAb

Code No.	Clone	Subclass	Quantity	Concentration
D146-3	48-12	Rat IgG2a	100 µL	1 mg/mL

BACKGROUND: Nectins originally identified as poliovirus receptor-related protein (PRR) are Ca²⁺-independent immunoglobulin-like cell-cell-adhesion molecules. Nectins comprise a family of four members: nectin-1 (CD111/PRR1), nectin-2 (CD112/PRR2), nectin-3 (CD113/PRR3) and Nectin-4 (PRR4). Nectin-2 and -3 are ubiquitously expressed whereas Nectin-1 is abundantly expressed in brain, and Nectin-4 is in placenta. Nectins colocalized with afadin, which an actin-filament binding protein to associated with the actin cytoskeleton. Nectins play important roles in diverse cell-cell junctions.

SOURCE: This antibody was purified from hybridoma (clone 48-12) supernatant using protein G agarose. This hybridoma was established by fusion of mouse myeloma cell P3U1 with Wister rat lymphocyte immunized with the IgG-Fc fusion mouse Nectin-1 extra-cellular region (28-345aa).

FORMULATION: 100 µg IgG in 100 µL volume of PBS containing 50% glycerol, pH 7.2. No preservative is contained.

STORAGE: This antibody solution is stable for one year from the date of purchase when stored at -20°C.

REACTIVITY: This antibody reacts with mouse Nectin-1 (85 kDa) on Immunocytochemistry.

APPLICATIONS:

- Western blotting; Not tested*
- Immunoprecipitation; Not tested
- Immunohistochemistry; Not tested*
- Immunocytochemistry; 20 µg/mL
- Flow cytometry; Not tested

*It is reported that this antibody can be used in Western blotting²⁾ and Immunohistochemistry¹⁻³⁾.

Detailed procedure is provided in the following **PROTOCOL**.

SPECIES CROSS REACTIVITY:

Species	Human	Mouse	Rat
Cell	Not tested	Transfectant	Not tested
Reactivity on IC		+	

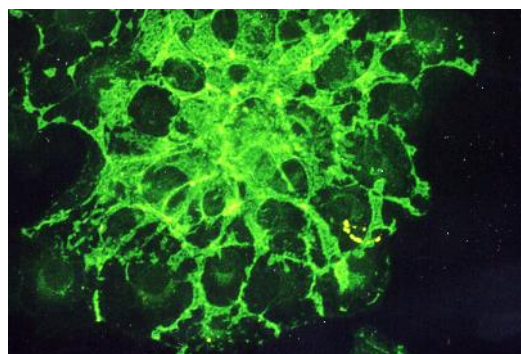
INTENDED USE:

For Research Use Only. Not for use in diagnostic procedures.

REFERENCES:

- 1) Geng, X., *et al.*, *Genes Cells* **21**, 88-98 (2016) [IHC]
- 2) Toyoshima, D., *et al.*, *PLoS One* **9**, e89763 (2014) [WB, IHC]
- 3) Yoshida, M., *et al.*, *Genes Cells* **17**, 455-472 (2012) [IHC]
- 4) Ishiuchi, T. and Takeichi, M., *Genes Cells* **17**, 387-397 (2012) [IC]
- 5) Togashi, H., *et al.*, *J. Cell Biol.* **174**, 141-151 (2006) [IC]
- 6) Inagaki, M., *et al.*, *Development* **132**, 1525-1537 (2005)
- 7) Mizoguchi, A., *et al.*, *J. Cell Biol.* **156**, 555-565 (2002)
- 8) Miyashita, M., *et al.*, *J. Biol. Chem.* **275**, 613-618 (2000)
- 9) Horikawa, S. K., *et al.*, *J. Biol. Chem.* **275**, 10291-10299 (2000)

Clone 48-12 is used in reference number 1) - 6).



Immunocytochemical detection of mouse Nectin-1 on transfectant.

PROTOCOL:

Immunocytochemistry

- 1) Culture the cells in the appropriate condition on a glass slide. (for example, spread 1 x 10⁴ cells for one slide, then incubate in a CO₂ incubator for one night.)
- 2) Fix the cells by immersing the slide in PBS containing 4% paraformaldehyde for 10 minutes at room temperature.
- 3) Wash the glass slide with PBS containing 0.1% Triton X-100 for 10 minutes at room temperature.
- 4) Add the primary antibody diluted with PBS as suggested in the **APPLICATIONS** onto the cells and incubate for 30 minutes at room temperature. (Optimization of antibody concentration or incubation condition is recommended if necessary.)
- 5) Wash the glass slide 3 times with PBS.
- 6) Add FITC conjugated anti-rat IgG antibody diluted with PBS onto the cells. Incubate for 30 minutes at room temperature. Keep out light by aluminum foil.

- 7) Wash the glass slide 3 times with PBS.
- 8) Wipe excess liquid off the slide but take care not to touch the cells. Never leave the cells to dry.
- 9) Promptly add mounting medium onto the slide, then put a cover slip on it.

RELATED PRODUCTS:

- K0224-3 Anti-Nectin-3 (CD113) (Human) mAb (N3.12.4)
- K0224-A48 Anti-Nectin-3 (CD113) (Human) mAb
-Alexa Fluor[®] 488 (N3.12.4)
- D175-3 Anti-CD112 (Human) mAb (TX31)
- D175-4 Anti-CD112 (Human) mAb-FITC (TX31)
- D146-3 Anti-Nectin-1 (Mouse) mAb (48-12)
- D083-3 Anti-CD112 (Nectin-2) (Mouse) mAb (502-57)
- D084-3 Anti-CD113 (Nectin-3) (Mouse) mAb (103-A1)
- M081-3 Rat IgG2a (isotype control) (2H3)