Product Information

Anti-Nectin-2/PVRL2 Antibody, Mouse Monoclonal

Clone R2.5254.2, Purified Hybridoma Cell Culture

SAB4200369

Product Description

Monoclonal Anti-Nectin-2/PVRL2 (mouse IgG1 isotype) is derived from the hybridoma R2.525.2 produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with 3T3 cells expressing human nectin-2 (GeneID: 5819).[1] The isotype is determined using a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Cat. No. ISO2). The antibody is purified from culture supernatant of hybridoma cells grown in a bioreactor.

Monoclonal Anti-Nectin-2/PVRL2 recognizes human, monkey, rat and mouse Nectin-2/PVRL2. The antibody may be used in various immunochemical techniques including, ELISA,[1] immunoblotting (~ 72 kDa), flow cytometry and immunochemistry. The antibody has been reported to block cell adhesion and herpes virus entry.[2]

Nectins are a family composed of 4 members: nectin-1, - 2, -3, and -4. All of the nectins form homo-*cis*-dimers and then homo- or hetero-*trans*-dimers through the extracellular region in a Ca^{2+}-independent manner, causing cell-cell adhesion. These proteins are one of the plasma membrane components of adherens junctions.[3] A member of this family, nectin-2, was found to be widely expressed in human tissues, including hematopoietic cells.[2] It also serves as an entry for certain mutant strains of herpes simplex virus and pseudorabies virus, and it is involved in cell to cell spreading of these viruses.[4-5] Variations in this gene have been associated with differences in the severity of multiple scelrosis.[6] In addition, the anti-apoptotic activity of nectin-2 together with its genetic alteration may also point it as a possible cancer biomarker.[7-8]

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide.

Antibody Concentration: ~ 1.0 mg/mL

Precautions and Disclaimer

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze at −20 °C in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilution samples should be discarded if not used within 12 hours.

Product Profile

Flow Cytometry

A working antibody concentration of 5.0-10.0 µg/test is recommended using $1x10^6$ MDA-MB-231 cells.

Immunocytochemistry

A working antibody concentration of 2.5-5 µg/mL is recommended using MDA-MB-231 cells.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining optimal working dilutions by titration.

References

1. Lopez, M., et al., *J. Virol.*, **74**: 1267-1274 (2000).
2. Lopez, M., et al., *Blood*, **92**: 4602-4611 (1998).
3. Ogita, H., et al., Proc. Jpn. Acad. Ser. B Phys. Biol. Sci., **86:** 621-629 (2010).
4. Cocchi, F., et al., *J. Virol.,* **72**: 9992-10002 (1998).
5. Martinez, W.M., and Spear P.G., *J. Virol.,* **75**: 11185- 11185 (2001).
6. Schmidt, S.*, et al., Genes Immun.,* **7**: 384-392 (2006).
7. Almire, C., et al., *Genes Chromosomes Cancer,* **46:** 1011-1018 (2007).
8. Kurokawa, Y., et al., *Int. J. Oncol.,* **28**: 383-391 (2006).

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