Anti-CD324 (E-Cadherin) eFluor® 660 (Alexa Fluor® 647 Replacement)

Catalog Number: 50-3249
Also known as: Epithelial Cadherin
RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Anti-CD324 (E-Cadherin) eFluor® 660 (Alexa Fluor® 647 Replacement)
REF **Catalog Number:** 50-3249
Clone: DECMA-1
Concentration: 0.2 mg/mL
Host/Isotype: Rat IgG1

Formulation: aqueous buffer, 0.09% sodium azide, contains stabilizer if necessary
Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.
LOT **Batch Code:** Refer to vial
Use By: Refer to vial

Description

The monoclonal antibody DECMA-1 recognizes mouse, human and canine CD324 also known as E-cadherin (Epithelial cadherin) or uvomorulin. Like the other cadherin family members P and N cadherin, E-cadherin is a transmembrane glycoprotein involved in intercellular adhesion. These proteins share a common basic structure. The extracellular portions of the proteins are largely composed of repeating domains, each with two consensus Ca2+-binding motifs. The cytoplasmic domain interacts with a-, b-, and g-catenins and actinins. These catenins connect E-cadherin with the cytoskeleton.

Expression is found in most epidermal cells including melanocytes and kerotinocytes. E-cadherin is localized at the intercellular boundaries of epithelial cells in several tissues, and is thought to play a role in maintenance of tissue integrity. Loss of E-cadherin function has been implicated in the progression of a variety of cancers.

E-Cadherin protein is sensitive to trypsin treatment, so exposure to trypsin should be minimized or avoided.

The monoclonal antibody DECMA-1 has been shown to have functional activity by disrupting adhesion in human, mouse and dog cells.

Applications Reported

This DECMA-1 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This DECMA-1 antibody has been tested by flow cytometric analysis of MDCK cell line. Optimal staining is achieved by intracellular staining as protein turnover can result in variable surface staining. This can be used at less than or equal to 0.5 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

eFluor® 660 is a replacement for Alexa Fluor® 647. eFluor® 660 emits at 659 nm and is excited with the red laser (633 nm). Please make sure that your instrument is capable of detecting this fluorochome.

References

Spencer HL, Eastham AM, Merry CL, Southgate TD, Perez-Campo F, Soncin F, Ritson S, Kemler R, Stern PL, Ward CM. E-cadherin inhibits cell surface localization of the pro-migratory 5T4 oncofetal antigen in mouse embryonic stem cells. Mol Biol Cell. 2007 Aug;18(8):2838-51. (DECMA-1, FC, WB, FA, (in mouse))

Nakagawa M, Fukata M, Yamaga M, Itoh N, Kaibuchi K. Recruitment and activation of Rac1 by the formation of E-cadherin-mediated cell-cell adhesion sites. J Cell Sci. 2001 May;114(Pt 10):1829-38. (DECMA-1, FA in canine cells, PubMed)

Lee MG, Sharrow SO, Farr AG, Singer A, Udey MC. Expression of the homotypic adhesion molecule E-cadherin by immature murine thymocytes and thymic epithelial cells. J Immunol. 1994 Jun 15;152(12):5653-9. (**DECMA-1**, FC in

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mouse cells)

Tang A, Eller MS, Hara M, Yaar M, Hirohashi S, Gilchrest BA. E-cadherin is the major mediator of human melanocyte adhesion to keratinocytes in vitro. J Cell Sci. 1994 Apr;107 (Pt 4):983-92. (DECMA-1, FC on human cells)

Vestweber D, Kemler R. Identification of a putative cell adhesion domain of uvomorulin. EMBO J. 1985 Dec 16;4(13A):3393-8. (DECMA-1, IP, WB, FA, PubMed)

Related Products
00-8222 IC Fixation Buffer
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