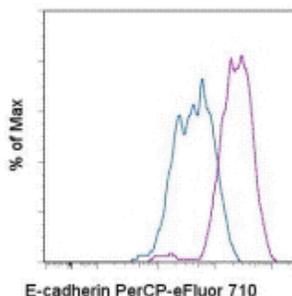


Anti-CD324 (E-Cadherin) PerCP-eFluor® 710

Catalog Number: 46-3249

Also Known As: epithelial cadherin

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



Staining of the MDCK cell line with staining buffer (autofluorescence) (blue histogram) or 0.5 ug of Anti-Human CD324 (E-Cadherin) PerCP-eFluor® 710 (purple histogram). Total viable cells were used for analysis.

Product Information

Contents: Anti-CD324 (E-Cadherin) PerCP-eFluor® 710

REF **Catalog Number:** 46-3249

Clone: DECMA-1

Concentration: 0.2 mg/mL

Host/Isotype: Rat IgG1

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

 **Temperature Limitation:** Store at 2-8°C. Do not freeze. Light sensitive material.

 **Batch Code:** Refer to Vial

 **Use By:** Refer to Vial

 **Caution, contains Azide**

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 α-, β-, and γ-catenins and actinins. These catenins connect E-cadherin with the cytoskeleton.

Expression is found in most epidermal cells including melanocytes and keratinocytes. 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 canine kidney 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 1.0 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

PerCP-eFluor® 710 can be used in place of PE-Cy5, PE-Cy5.5 or PerCP-Cy5.5. PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm). Please make sure that your instrument is capable of detecting this fluorochrome. For a filter configuration, we recommend using the 685 LP dichroic mirror and 710/40 band pass filter, however the 695/40 band pass filter is an acceptable alternative.

Our testing indicates that PerCP-eFluor® 710 conjugated antibodies are stable when stained samples are exposed to freshly prepared 2% formaldehyde overnight at 4°C, but please evaluate for alternative fixation protocols.

Click [here](#) or contact eBioscience Technical Support for more information on eFluor® Organic Dyes including PerCP-eFluor® 710.

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))

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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 mouse cells)

Tang A, Eller MS, Hara M, Yaar M, Hirohashi S, Gilchrist 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

46-4714 Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (P3.6.2.8.1)

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Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com