

Alexa Fluor® 647 anti-mouse/human CD324 (E-Cadherin)

Catalog # / Size: 1336535 / 25 µg
1336540 / 100 µg

Clone: DECMA-1

Isotype: Rat IgG1, κ

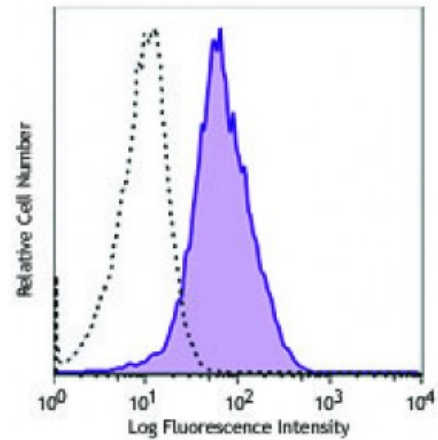
Immunogen: E-Cadherin extracellular domain

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5

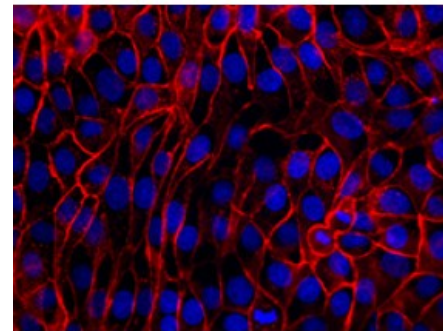


MDCK epithelial cell line was stained with CD324 (clone DECMA-1) Alexa Fluor® 647 (filled histogram) or rat IgG1, κ Alexa Fluor® 647 isotype control (open histogram).

Applications:

Applications: Immunofluorescence

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤1.0 microg per million cells in 100 microL volume. For immunofluorescence microscopy, a concentration range of 2-10 µg/ml is recommended. For immunohistochemical staining on frozen tissue sections, a concentration range of 5 - 10 microg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application.



Madin-darby canine kidney epithelial cell line, MDCK, was cultured in a chamber slide until confluent. The cells were fixed with 1% paraformaldehyde (PFA) for 10 minutes, permeabilized with 0.5% Triton X-100 for 10 minutes, and blocked with 5% FBS for 30

* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.

Application Notes: Additional reported applications (for relevant formats) include: immunoprecipitation¹, Western Blotting¹, immunomicroscopy³, and biological function^{1,2}.

Application References:

1. Vestweber D, *et al.* 1985. *EMBO*. 4:3393. (IP, WB, FA)
2. Nakagawa M, *et al.* 2001. *J. Cell Sci.* 114:1829. (FA in canine cells)
3. Mohamet L, *et al.* 2010. *PLoS ONE*. 5:e12921. (IF)

Description: CD324, also known as E-cadherin, cadherin-1, CDH1, and UVO is a member of the cadherin superfamily. It is a calcium-dependent, transmembrane cell-cell adhesion glycoprotein composed of four extracellular cadherin repeats and a highly conserved cytoplasmic tail region. CD324 is widely expressed in epithelial cells in the colon, uterus, liver, keratinocytes, brain, heart, muscle, kidney, and pancreas as well as erythroid cells. CD324 functions as a cell adhesion molecule involved in development, bacterial pathogenesis, and tumor invasion. In bacterial pathogenesis, the ectodomain of CD324 mediates bacterial adhesion to mammalian cells, while the cytoplasmic domain is required for internalization. CD324 binds to the $\alpha E\beta 7$ integrin to mediate cell adhesion and also interacts with a number of intracellular proteins including including erbin, ezrin, caspase-3, caspase-8, β -catenin, presenilin 1, and casein kinase II as well as other extracellular proteins including the EGF receptor.

Antigen
References:

1. Overduin M, *et al.* 1995. *Science* 267:386.
2. Boggon TJ, *et al.* 2002. *Science* 296:1308.
3. Berx G, *et al.* 1995. *EMBO J.* 14:6107.
4. Perl AK, *et al.* 1998. *Nature*