

PE/Cy7 anti-mouse/human CD324 (E-Cadherin)

Catalog # / Size: 1336545 / 25 µg
1336550 / 100 µg

Clone: DECMA-1

Isotype: Rat IgG1, κ

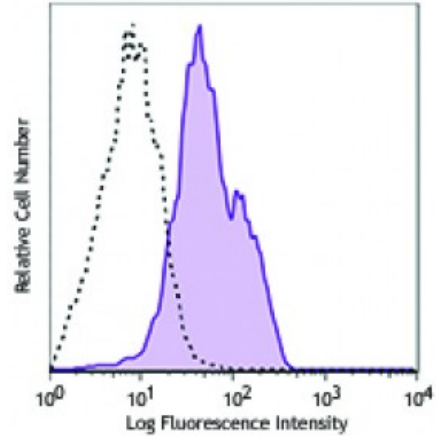
Immunogen: E-Cadherin extracellular domain

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

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

Concentration: 0.2



MDCK epithelial cell line was stained with CD324 (clone DECMA-1) PE/Cy7 (filled histogram) or rat IgG1, κ PE/Cy7 isotype control (open histogram).

Applications:

Applications: Flow Cytometry

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 ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

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Application Notes: Additional reported applications (for relevant formats) include: immunoprecipitation¹, Westen 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. Bex G, *et al.* 1995. *EMBO J.* 14:6107.
4. Perl AK, *et al.* 1998. *Nature*