SONY

Product Data Sheet

Purified anti-mouse/human CD324 (E-Cadherin)

Catalog # / Size: 1336510 / 100 µg
1336505 / 25 µg

Clone: DECMA-1

Isotype: Rat IgG1, κ

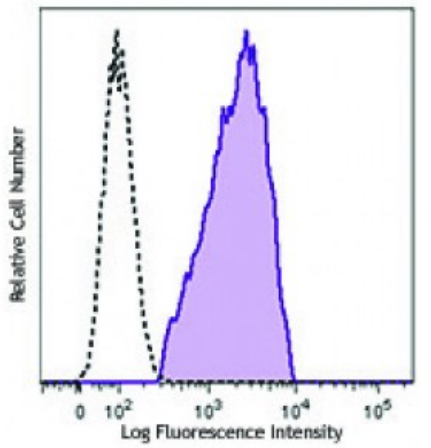
Immunogen: E-Cadherin extracellular domain

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography.

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

Concentration: 0.5



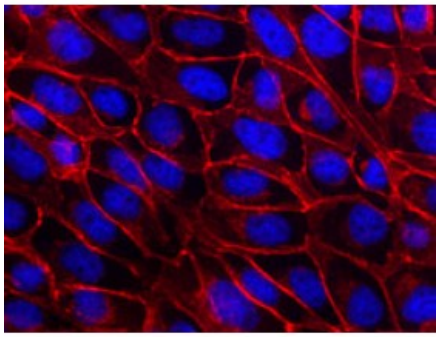
MDCK epithelial cell line was stained with purified CD324 (clone DECMA-1, filled histogram) or purified rat IgG1, κ isotype control (open histogram), followed by anti-rat IgG PE.

Applications:

Applications: Other

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. It is recommended that the reagent be titrated for optimal performance for each application.

Application Notes: Additional reported applications (for relevant formats) include: immunoprecipitation1, Westen Blotting1, immunomicroscopy3, and biological function[1,2].



Canine kidney cell line MDCK was cultured in a chamber slide till 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 minutes. Then cells were

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 αEβ7 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*