## **Product Data Sheet**

### PerCP/Cyanine5.5 anti-mouse/human CD324 (E-Cadherin)

Catalog # /  $1336590 / 100 \mu g$ 

**Size:** 1336585 / 25 μg

Clone: DECMA-1

**Isotype:** Rat IgG1, κ

Immunogen: E-Cadherin extracellular domain

Reactivity: Human, Other

**Preparation:** The antibody was purified by affinity

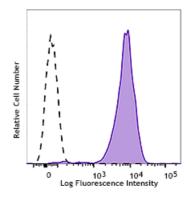
chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cyanine5.5 and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.2 mg/ml



MDCK epithelial cell line was stained with CD324 (E-Cadherin,

clone DECMA-1)

PerCP/Cyanine5.5 (filled histogram) or Rat IgG1, κ

PerCP/Cyanine5.5 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  $\leq 1.0~\mu g$  per million cells in  $100~\mu l$  volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum

emission of 690 nm.

**Application** 

Notes:

Additional reported applications (for relevant formats) include: immunoprecipitation  $^1$ , Western Blotting  $^1$ , immunomicroscopy  $^3$ , and

biological function $^{1,2}$ .

Application 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

#### **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,  $\beta$ -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 392:190.