SONY

Product Data Sheet

PerCP/Cy5.5 anti-human CD324 (E-Cadherin)

Catalog # / Size: 2220570 / 100 tests
2220565 / 25 tests

Clone: 67A4

Isotype: Mouse IgG1, κ

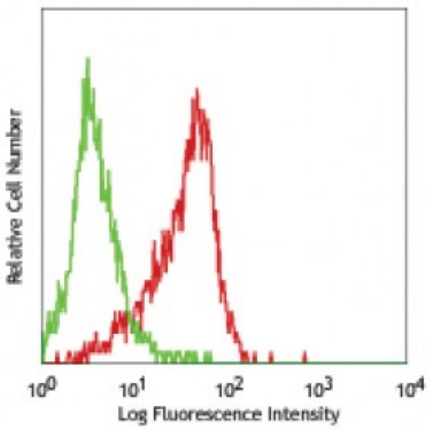
Immunogen: T-47D cells

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human colon carcinoma cell line (HT29) stained with CD324 (clone 67A4) PerCP/Cy5.5 (red histogram), or mouse IgG1, κ PerCP/Cy5.5 (green 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 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

Application References:

1. Armeanu S, *et al.* 1995. *J. Cell Biol.* 131:243.
2. Bühring HJ, *et al.* 1996. *Leukemia* 10:106.
3. Yauch RL, *et al.* 2005. *Clin. Cancer Res.* 11:8686. (WB)
4. Oeztuerk-Winder F, *et al.* 2012. *EMBO J.* 31:3431. (FC) PubMed
5. Diessner J, *et al.* 2014. *Cell Death Dis.* 5:1149. PubMed
6. Cai X, *et al.* 2014. *PLoS One.* 9:108942. PubMed

Description: The 67A4 antibody recognizes human CD324 also known as E-cadherin, cadherin-1, and UVO. CD324, a member of the cadherin superfamily, is a calcium-dependent, transmembrane cell-cell adhesion glycoprotein composed of 4 extracellular cadherin repeats and a highly conserved cytoplasmic tail region with a predicted molecular weight of approximately 100 kD. 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, casein kinase II , as well as other extracellular proteins including the EGF receptor. CD324 is phosphorylated

on multiple residues (S857, S866, S870, S872), and can be proteolytically cleaved at reside D769 by caspase-3. The 67A4 antibody has been shown to be useful for flow cytometry.

Antigen References:

1. Overduin M, *et al.* 1995. *Science* 267:386.
2. Boggon TJ, *et al.* 2002. *Science* 296:1303.
3. Berx G, *et al.* 1995. *EMBO J.* 14:6107.
4. Perl AK, *et al.* 1998. *Nature* 39