

**FITC anti-human CD324 (E-Cadherin)**

**Catalog # /** 2220515 / 25 tests  
**Size:** 2220520 / 100 tests

**Clone:** 67A4

**Isotype:** Mouse IgG1, κ

**Immunogen:** T-47D cells

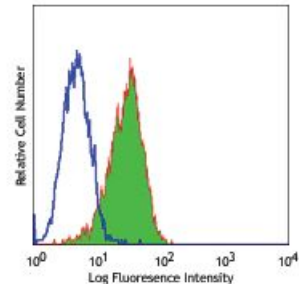
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions.

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

**Workshop Number:** IV T-164

**Concentration:** Lot-specific

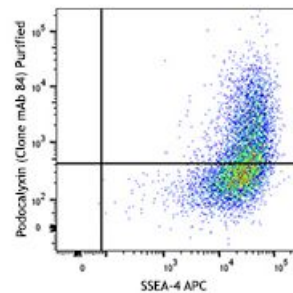


Human colon carcinoma cell line (HT29) stained with CD324 (clone 67A4) FITC (filled histogram), or mouse IgG1, κ FITC (open histogram).

**Applications:**

**Applications:** Flow Cytometry, Other

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 µl to 5 µl per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



Human teratocarcinoma cell line, NCCIT, stained with SSEA-4 APC and purified PODXL (clone mAb 84, left) or mouse IgM, κ isotype control (right), followed by anti-mouse IgM PE.

- Application References:**
- Armeanu S, *et al.* 1995. *J. Cell Biol.* 131:243.
  - Bühring HJ, *et al.* 1996. *Leukemia* 10:106.
  - Yauch RL, *et al.* 2005. *Clin. Cancer Res.* 11:8686. (WB)
  - Oeztuerk-Winder F, *et al.* 2012. *EMBO J.* 31:3431. (FC) [PubMed](#)
  - Ardehali R, *et al.* 2013. *PNAS.* 110:3405. [PubMed](#)
  - Rasanen K, *et al.* 2013. *Mol Cell Proteomics.* 12:3778. [PubMed](#)
  - Chaudhury A, *et al.* 2014. *Nucleic Acids Res.* 42:86. [PubMed](#)
  - Milne P, *et al.* 2015. *Blood.* 125:470. [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  $\alpha_5\beta_7$  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, 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 residue 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* 392:190.