

1F-588-T100

Monoclonal Antibody to CD324 / E-Cadherin Fluorescein (FITC) conjugated (100 tests)

Clone:	67A4
Isotype:	Mouse IgG1
Specificity:	The mouse monoclonal antibody 67A4 recognizes CD324 / E-cadherin, an approximately 100 kDa epithelial cell adhesion molecule, whose detection is important for determination of invasive potential of epithelial neoplasms. HLDA VIII
Immunogen:	T-47D cells
Species Reactivity:	Human
Preparation:	The purified antibody is conjugated with Fluorescein isothiocyanate (FITC) under optimum conditions. The reagent is free of unconjugated FITC and adjusted for direct use. No reconstitution is necessary.
Storage Buffer:	The reagent is provided in phosphate buffered saline (PBS) containing 15 mM sodium azide and 0.2% (w/v) high-grade protease free Bovine Serum Albumin (BSA) as a stabilizing agent.
Storage / Stability:	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light. Do not use after expiration date stamped on vial label. Short-term exposure to room temperature should not affect the quality of the reagent. However, if reagent is stored under any conditions other than those specified, the conditions must be verified by the user.
Usage:	The reagent is designed for Flow Cytometry analysis of human blood cells using 20 µl reagent / 100 µl of whole blood or 10 ⁶ cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.
Expiration:	See vial label
Lot Number:	See vial label
Background:	CD324 / E-cadherin is an epithelial cell surface molecule, which provides calcium-dependent homophilic interactions with E-cadherin of another cell. These interactions take part in morphogenetic programs controlling the maintenance of the structural and functional integrity of epithelia and affect invasive potential of epithelial neoplasms. CD324 / E-cadherin is implicated in cell growth and differentiation, cell recognition, and sorting during developmental morphogenesis, as well as in aggregation-dependent cell survival. CD324 / E-cadherin-mediated cell adhesion system is highly regulated from inside the cell by a number of intracellular signaling pathways.

For laboratory research only, not for drug, diagnostic or other use.

**Antibodies****References:**

- *Takeichi M: Cadherin cell adhesion receptors as a morphogenetic regulator. *Science*. 1991 Mar 22;251(5000):1451-5.
- *Pece S, Chiariello M, Murga C, Gutkind JS: Activation of the protein kinase Akt/PKB by the formation of E-cadherin-mediated cell-cell junctions. Evidence for the association of phosphatidylinositol 3-kinase with the E-cadherin adhesion complex. *J Biol Chem*. 1999 Jul 2;274(27):19347-51.
- *Pece S, Gutkind JS: Signaling from E-cadherins to the MAPK pathway by the recruitment and activation of epidermal growth factor receptors upon cell-cell contact formation. *J Biol Chem*. 2000 Dec 29;275(52):41227-33.
- *Armeanu S, Bühring HJ, Reuss-Borst M, Müller CA, Klein G: E-cadherin is functionally involved in the maturation of the erythroid lineage. *J Cell Biol*. 1995 Oct;131(1):243-9.
- *Bühring HJ, Müller T, Herbst R, Cole S, Rappold I, Schuller W, Zhu X, Fritzscht U, Faul C, Armeanu S, Ullrich A, Klein G, Schmidt H: The adhesion molecule E-cadherin and a surface antigen recognized by the antibody 9C4 are selectively expressed on erythroid cells of defined maturational stages. *Leukemia*. 1996 Jan;10(1):106-16.
- *Novak N, Kraft S, Haberstok J, Geiger E, Allam P, Bieber T: A reducing microenvironment leads to the generation of FcepsilonRIhigh inflammatory dendritic epidermal cells (IDEC). *J Invest Dermatol*. 2002 Oct;119(4):842-9.
- *Servet-Delprat C, Vidalain PO, Bausinger H, Manié S, Le Deist F, Azocar O, Hanau D, Fischer A, Rabourdin-Combe C: Measles virus induces abnormal differentiation of CD40 ligand-activated human dendritic cells. *J Immunol*. 2000 Feb 15;164(4):1753-60.
- *Furio L, Guezennec A, Ducarre B, Guesnet J, Peguet-Navarro J: Differential effects of allergens and irritants on early differentiating monocyte-derived dendritic cells. *Eur J Dermatol*. 2008 Mar-Apr;18(2):141-7.
- *Robertson H, Ali S, McDonnell BJ, Burt AD, Kirby JA: Chronic renal allograft dysfunction: the role of T cell-mediated tubular epithelial to mesenchymal cell transition. *J Am Soc Nephrol*. 2004 Feb;15(2):390-7.
- *Kutlesa S, Wessels JT, Speiser A, Steiert I, Müller CA, Klein G: E-cadherin-mediated interactions of thymic epithelial cells with CD103+ thymocytes lead to enhanced thymocyte cell proliferation. *J Cell Sci*. 2002 Dec 1;115(Pt 23):4505-15.
- *Caberg JH, Hubert PM, Begon DY, Herfs MF, Roncarati PJ, Boniver JJ, Delvenne PO: Silencing of E7 oncogene restores functional E-cadherin expression in human papillomavirus 16-transformed keratinocytes. *Carcinogenesis*. 2008 Jul;29(7):1441-7.
- *Lin JC, Liao SK, Lee EH, Hung MS, Sayion Y, Chen HC, Kang CC, Huang LS, Cherng JM. Molecular events associated with epithelial to mesenchymal transition of nasopharyngeal carcinoma cells in the absence of Epstein-Barr virus genome. *J Biomed Sci*. 2009 Nov 24;16:105.
- *And many other.

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