

11-588-C025

## Monoclonal Antibody to CD324 / E-Cadherin Purified Antibody (0.025 mg)

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** 

Regulatory Status: RUO

Immunogen: T-47D cells

Species Reactivity: Human

**Application:** Flow Cytometry

Application note: Tested on cell lines CACO-2 and HT-29. In this case the

recommended concentration is 5-10 μg/ml per 1 million cells/ml.

Immunoprecipitation Western Blotting

Immunohistochemistry (frozen sections)
Recommended dilution:4-8 µg/ml

Positive tissue:tonsil

Immunocytochemistry

**Purity:** > 95% (by SDS-PAGE)

**Purification:** Purified by protein-A affinity chromatography

Concentration: 1 mg/ml

**Storage Buffer:** Phosphate buffered saline (PBS) with 15 mM sodium azide, approx. pH 7.4

Storage / Stability: Store at 2-8°C. Do not freeze. Do not use after expiration date stamped on vial

label.

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 intaractions 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.



## PRODUCT DATA SHEET

## 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, Fritzsch 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 FcepsilonRlhigh 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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