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**anti-E-Cadherin**

Cat #: HM1048  
Mouse monoclonal IgG  
0.2 µg/µl, store at 4 °C

For research use only

**BACKGROUND**

Cadherins are comprised of a family of Ca<sup>++</sup>-dependent adhesion proteins that serve to mediate cell-cell interactions that are critical to tissue structure and morphogenesis. The classical cadherin (N-, E- and P-Cadherin) consists of a large extracellular domain that has a series of 5 homologous NH<sub>2</sub> terminal repeats, a transmembrane region and a highly conserved cytoplasmic tail.

E Cadherin plays an important role in the formation of cell-cell contacts in epithelia irrespective of their origin form ecto-, meso- or endodermal tissue. Mutations in its gene are correlated with gastric, breast, colorectal, thyroid and ovarian cancer. Loss of function is thought to contribute to progression in cancer by increasing proliferation, invasion, and/or metastasis.

**SPECIFICITY**

This antibody specifically recognizes E-Cadherin of human, mouse and rat origin.

The antibody can be used in Western blotting, immunoprecipitation and immunostaining.

**IMMUNOGEN**

A synthetic peptide derived from N-terminal region of human E-Cadherin protein.

**STORAGE**

This antibody is stable for 12 months when stored at 2-8°C.

**REFERENCES**

1. Takeichi, M. 1988. The cadherins: cell-cell adhesion molecules controlling animal morphogenesis. *Development* 102: 639-655.
2. Tanihara, H., Sano, K., Heimark, R.L., St. John, T., and Suzuki, S. 1994. Cloning of five human cadherins clarifies characteristic features of cadherin extracellular domain and provides further evidence for two structurally different types of cadherin. *Cell Adhes. Commun.* 2: 15-26.
3. Ranscht, B. 1994. Cadherins and catenins: interactions and functions in embryonic development. *Curr. Opin. Cell Biol.* 6: 740-746.
4. Takeichi, M. 1995. Morphogenetic roles of classic cadherins. *Curr. Opin. Cell Biol.* 7: 619-627.
5. Overduin, M., Harvey, T.S., Bagby, S., Tong, K.I., Yau, P., Takeichi, M. and Ikura, M. (1995) Solution structure of the epithelial cadherin domain responsible for selective cell adhesion. *Science* 267, 386-389.
6. Berx, G., Cleton-Jansen, A.M., Nollet, F., de Leeuw, W.J., van de Vijver, M., Cornelisse, C. and van Roy, F. (1995) E-cadherin is a tumour/invasion suppressor gene mutated in human lobular breast cancers. *EMBO J.* 14, 6107-6115.

7. Niessen, C.M. and Gumbiner, B.M. (2002) Cadherin-mediated cell sorting not determined by binding or adhesion specificity. *J. Cell Biol.* 156, 389-399.
8. Avizienyte, E., Wyke, A.W., Jones, R.J., McLean, G.W., Westhoff, M.A., Brunton, V.G. and Frame, M.C. (2002) Src-induced de-regulation of E-cadherin in colon cancer cells requires integrin signaling. *Nat. Cell Biol.* 4, 632-638.
9. Xu, Y. and Yu, Q. (2003) E-cadherin negatively regulates CD44-hyaluronan interaction and CD44-mediated tumor invasion and branching morphogenesis. *J. Biol. Chem.* 278, 8661-8668
10. Troyanovsky, R.B., Sokolov, E. and Troyanovsky, S.M. (2003) Adhesive and lateral E-cadherin dimers are mediated by the same interface. *Mol. Cell. Biol.* 23, 7965-7972

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**Hypromatrix, Inc.**  
100 Barber Avenue  
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USA

Tel: 508-856-7900  
Fax: 508-302-0748  
Email: [contact@hypromatrix.com](mailto:contact@hypromatrix.com)  
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