



Qty: 100 µg

Rat anti-E-Cadherin (Mouse)

Catalog No. 13-1800

Lot No.: See product label

Exp. Date.: See product label

Rat anti-E-Cadherin (Mouse)

FORM

This monoclonal antibody is supplied lyophilized. Reconstitution with 50 µl H₂O yields a final antibody concentration of 2 mg/ml in PBS containing 1.0% bovine serum albumin. This antibody was purified from serum-free hybridoma supernatant by ammonium sulfate precipitation and anion exchange chromatography.

Note: *This antibody does not contain a preservative.*

CLONE: ECCD-1

ISOTYPE: IgG₁

IMMUNOGEN: Mouse teratocarcinoma cell line F9

CLONING PARTNER: Myeloma cell line P3-X63-Ag8

SPECIFICITY

This antibody reacts strongly with mouse epithelial cadherin (E-cadherin/uvomorulin).

RECONSTITUTION

Reconstitute with 50 µl of distilled water to yield a final antibody concentration of 2 mg/ml in PBS containing 1.0% bovine serum albumin.

USAGE

This antibody can be used for Epitope Mapping⁽¹⁰⁾ and inhibition of E-cadherin-dependent cell-cell contact for adhesion blockage^(12,13). Cat. No. 13-1900 can be used as negative control for cell-cell contact adhesion blockage⁽¹³⁾.

Inhibition of E-cadherin-dependent cell-cell contact^(12,13): 200 µg/ml for adhesion blockage
Epitope Mapping⁽¹⁰⁾

STORAGE

Store at 2-8°C. Reconstituted solution can be stored at -20°C for 1 year, or at 2-8°C for 6 months, after 0.1% sodium azide had been added. Avoid repeated freezing and thawing.

BACKGROUND

Cadherins are a multifunctional family of Ca²⁺-dependent, transmembrane glycoproteins, which promote and maintain cell adhesion in virtually all multicellular organisms. The cadherin superfamily comprises over forty proteins which are, on average, 50-60% homologous (reviewed in ref 1). Cadherin expression is required for the assembly of cells into solid tissues and importantly, cadherins are expressed in a tissue specific fashion.⁽²⁾ Homotypic cellular interactions are promoted by homophilic interactions between the extracellular regions of like cadherin molecules on neighboring cells. Recent crystal structure analysis of an extracellular cadherin domain suggests that individual cadherin molecules cooperate to form a linear cell adhesion zipper.⁽³⁾ In adherens junctions, cadherins are anchored to the actin cytoskeleton by interaction with the small cytoplasmic proteins β-catenin and γ-catenin which both bind to the actin binding protein α-catenin.^(4,5) The interaction of β-catenin with the cytoplasmic tail of cadherins and other cytoplasmic proteins, including Tcf-family transcription factors and the tumor suppressor protein APC, is thought to be mediated through a region of the β-catenin molecule containing multiple repeats of the 42 amino acid armadillo sequence motif (ref 6). In addition to playing important roles in differentiation and tissue morphogenesis, cadherins also appear to play a significant role in modulating tumor invasion and metastasis (see ref 7 for review). The expression of E-cadherin correlates inversely with the motile and invasive behavior of tumor cells. In addition, the tissue specificity of cadherin subtypes are becoming valuable markers for the identification and differential of certain cancers.^(8,9)

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(Rev 03/10) DCC-10-0631














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REFERENCES

1. Marrs J. A., and Nelson W. J. (1996) *International Review of Cytology* 165:159-205.
2. Takeichi M. (1991) *Science* 251:1451-1455.
3. Shapiro L., et al and Hendrickson, W. A. (1995) *Nature* 374, 327-337.
4. Ozawa M, Baribault H. and Kemier R. (1989) *EMBO J.* 8:1711-1717.
5. Aberle H., et al, and Hoschuetzky H. (1994) *J. Cell Sci.* 107:3655-3663.
6. Huber A. H., Nelson W. J., and Weis W. I. (1997) *Cell* 90:871-882.
7. Jiang W. G. (1996) *British Journal of Surgery* 83:437-446.
8. Schofield K., D'Aquila T and Rimm D. L. (1997) *Cancer* 81:293-298
9. Soler A. P., et al, and Keshgegian A. A. (1997) *American Journal of Pathology* 151:471-478
10. Nose, A. et al; *Cell* 61:147-155 (1990).
11. Roh, J-Y & Stanley, J.R.; *Journal of Cell Biology* 128(5) 939-947 (1995).
12. Babich, M. and Foti, L.; *Life Sciences* 54:201-208 (1994).

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Explanation of symbols

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		<i>In vitro</i> diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

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