

Qty: 100 µg

Rat anti-E-Cadherin (Mouse)

Catalog No. 13-1900

Lot No.: See product label

Exp. Date: See product label

## Rat anti-E-Cadherin (Mouse)

### FORM

This monoclonal antibody is supplied lyophilized in phosphate-buffered saline, containing 1.0% bovine serum albumin. The antibody was made in serum-free supernatant, and purified by ammonium sulfate precipitation and anion exchange chromatography.

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

**CLONE:** ECCD-2

**ISOTYPE:** Rat IgG<sub>2a</sub>

**IMMUNOGEN:** Mouse liver E-cadherin fragment

### RECONSTITUTION

Reconstitute the lyophilizate with 50 µL of distilled water to yield a concentration of 2 mg/mL. Recommended diluent: PBS containing 0.1% NaN<sub>3</sub> and 1.0% bovine serum albumin.

### SPECIFICITY

This antibody reacts with mouse (E-cadherin or uvomorulin). ECCD-2 antibody has moderate cross-reactivity with human E-cadherin.

**REACTIVITY:** Mouse. Also has limited affinity for human.

### USAGE

This antibody can be used for immunohistochemistry<sup>(5)</sup> of paraffin-embedded<sup>(4)</sup> and frozen tissue sections<sup>(18,21)</sup>, immunoblotting<sup>(7)</sup>, immunoprecipitation<sup>(8,11)</sup>, flow cytometry<sup>(3)</sup>, and immunofluorescence<sup>(12, 19-20)</sup>. Cat No. 13-1800 can be used for inhibition of E-cadherin-dependent cell-cell contact for adhesion blockage<sup>(10)</sup>.

<b>Immunohistochemistry (Paraffin-embedded tissue)</b> <sup>(4,5,18,21)</sup> :	10 µg/mL
<b>Western blotting</b> <sup>(7)</sup> :	1-10 µg/mL
<b>Immunoprecipitation</b> <sup>(8,11)</sup> :	
<b>Flow Cytometry</b> <sup>(3)</sup> :	
<b>Immunofluorescence</b> <sup>(12,19,20)</sup> :	
<b>Immunoblotting</b> <sup>(7)</sup> :	1-2 µg/mL

### STORAGE

Lyophilized antibody is stable at 2-8°C for 2 years. Reconstituted solution (2.0mg/mL) should be stored in aliquots at -20°C for 1 year. Alternatively reconstituted solution can be stored at 2-8°C for 6 months, if 0.1% sodium azide is added. Solutions at less than 2.0mg/mL concentration should not be stored.

### BACKGROUND

Cadherins are a multifunctional family of Ca<sup>2+</sup>-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 13). Cadherin expression is required for the assembly of cells into solid tissues and importantly, cadherins are expressed in a tissue specific fashion.<sup>(2)</sup> 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.<sup>(9)</sup> 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.<sup>(1,6)</sup> 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 12). 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 14 for review). The expression of E-cadherin correlates inversely with the motile and invasive behavior of tumor cells.

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## REFERENCES

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## RELATED PRODUCTS

<b>Product</b>	<b>Clone/PAD</b>	<b>Cat. No.</b>
Ms x E-Cadherin	4A2C7	33-4000
Ms x E-Cadherin	HECD-1	13-1700
Ms x E-Cadherin	SHE78-7	13-5700
Rt x E-Cadherin	ECCD-1	13-1800
Rt x N-Cadherin	NCD-2	13-2100
Ms x N-Cadherin	3B9	33-3900
Rt x P-Cadherin	PCD-1	13-2000
Ms x P-Cadherin	NCC-CAD-299	13-5800
Rb x pan-Cadherin	ZyPC7	71-7100
E-Cadherin ELISA Kit (42 test)	Kit	99-1700
Ms x $\alpha$ -Catenin	$\alpha$ CAT-7A4	13-9700
Rb x $\alpha$ -Catenin	ZER2	71-1200
Ms x $\beta$ -Catenin	CAT-5H10	13-8400
Ms x $\gamma$ -Catenin	PG-11E4	13-8500
Ms x p120 <sup>ctn</sup>	15D2	33-9600
Rb x $\beta$ -Catenin	CAT-15	71-2700
Protein A	Sepharose <sup>®</sup> 4B	10-1041
rec-Protein G	Sepharose <sup>®</sup> 4B	10-1241

<b>Conjugate</b>	<b>ZyMAX™ Goat x Rabbit IgG (H+L)</b>	<b>ZyMAX™ Goat x Mouse IgG (H+L)</b>
Purified	81-6100	81-6500
FITC	81-6111	81-6511
TRITC	81-6114	81-6514
Cy™3	81-6115	81-6515
Cy™5	81-6116	81-6516
HRP	81-6120	81-6520
AP	81-6122	81-6522
Biotin	81-6140	81-6540

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Explanation of symbols			
Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		In vitro 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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