



Qty: 100 µg

Rat anti-N-Cadherin

(Chicken)

Catalog No. 13-2100

Lot No. See product label

Exp. Date: See product label

Rat anti-N-Cadherin (Chicken)

FORM

This monoclonal antibody is supplied lyophilized in 10 mM PBS (pH 7.4), 1.0% bovine serum albumin. Antibody was made in serum-free supernatant, and purified by ammonium sulfate precipitation and anion exchange chromatography.

CLONE: NCD-2

ISOTYPE: IgG2a

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

IMMUNOGEN: Neuronal tissue of chick embryos

CLONING PARTNER: Myeloma cell line P3-X63-Ag8-U1

SPECIFICITY

This antibody reacts strongly with chicken and xenopus neural cadherin (N-cadherin).

RECONSTITUTION

Reconstitute the lyophilizate with 50 µl of distilled water to yield a concentration of 2 mg/ml. Recommended diluent: 20mM TBS with 10mM CaCl₂ and 1.0% bovine serum albumin. Add 0.1% sodium azide (NaN₃) if needed.

USAGE

Immunohistochemistry ⁽¹⁰⁾	10 µg/ml
Western blotting ⁽¹³⁾	1-10 µg/ml
Inhibition of N-cadherin-dependent cell-cell contact:	100 µg/ml for adhesion blockage
Immunoprecipitation ⁽¹¹⁾	
Immunoblotting ⁽¹²⁾	
Affinity Chromatography ⁽⁵⁾	
Epitope Mapping ⁽¹⁵⁾	
Adhesion Inhibition ⁽¹⁶⁻¹⁷⁾	

STORAGE

Store lyophilized antibody at 2-8°C, for up to expiration date, as indicated on product label. The reconstituted stock solution (2 mg/ml) should be stored at -20°C for up to one year. In 0.1% NaN₃ added then store at 2-8°C for up to 6 months.

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⁽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.

(cont'd)

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





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REFERENCES

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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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