Qty: 100 µg

Rat anti-P-Cadherin

(Mouse)

Catalog No. 13-2000Z

Lot No.

Rat anti-P-Cadherin (Mouse)

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

CLONE: PCD-1 **ISOTYPE:** IgG2a

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

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

IMMUNOGEN: Mouse endoderm cell line PSA5-E.

SPECIFICITY
This antibody reacts strongly with mouse placental cadherin (P-cadherin).

RECONSTITUTION
Reconstitute the lyophilizate with 200 µl of distilled water to yield a concentration of 0.5 mg/ml. Recommended diluent: PBS containing 1.0% bovine serum albumin.

USAGE

Immunohistochemistry[11]:	10 µg/ml
Western blotting:	1-10 µg/ml
Inhibition of P-cadherin-dependent cell-cell contact[13]:	60 µg/ml for adhesion blockage
Epitope Mapping[10]	
ELISA[12]	

STORAGE
Store at 2-8°C for up to one month. Store at –20°C for long term storage. Avoid repeated freezing and thawing.

BACKGROUND
Cadherins are a multifunctional family of Ca^{2+}-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 homophillic 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 is becoming valuable markers for the identification and differential diagnosis of certain cancers[8,9].

(cont'd)

REFERENCES

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RELATED PRODUCTS

Product	***Clone/PAD***	***Cat. No.***
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 E-Cadherin	ECCD-2	13-1900
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 α-Cadherin	αCAT-7A4	13-9700
Rb x α-Cadherin	ZER2	71-1200
Ms x β-Catenin	CAT-5H10	13-8400
Ms x γ-Caternin	PG-11E4	13-8500
Ms x $p120^{ctn}$	15D2	33-9600
Rb x β-Catenin	CAT-15	71-2700

Product	***Conjugate***	***Cat. No.***
Goat anti-Rat IgG (H+L)	Purified	62-9500
	FITC	62-9511
	TRITC (Rhodamine)	62-9514
	Cy™3	62-9515
	Cy™5	62-9516
	HRP	62-9520
	Alkaline Phosphatase	62-9522
	Biotin	62-9540
	Sepharose® 4B	62-9541
Protein A	Sepharose® 4B	10-1041
rec-Protein G	Sepharose® 4B	10-1241

NOTE: 13-2000 is equivalent to M109.

For Research Use Only

JB010126