

Qty: 100 μg/200μL

Mouse anti-Cadherin 11

**Catalog No.** 32-1700

Lot No.

## Mouse anti-Cadherin 11

## **FORM**

This monoclonal antibody is supplied as a 200 µL aliquot at a concentration of 0.5 mg/mL in PBS, pH 7.4, containing 0.1% sodium azide. The antibody is purified from ascites fluid by Protein A affinity chromatography.

**CLONE**: 5B2H5 **ISOTYPE**: Mouse IgG<sub>1</sub>-kappa

#### **IMMUNOGEN**

Recombinant protein derived from an intracellular sequence of the human Cadherin 11 protein.

### **SPECIFICITY**

This antibody is specific for the ~110 kDa Cadherin 11 protein. Cross-reactivity with other Cadherin family members has not been observed.

#### REACTIVITY

This antibody is confirmed reactive with human and mouse Cadherin 11. Reactivity was confirmed on Western blots using MDA.MB231 cells (human) and mouse L fibroblast lysates. Reactivity with other species has not been evaluated.

Sample	ELISA	Immuno- histochemistry (frozen)	Immuno- precipitation (native)	Western blotting
Human		+++	+++	+++
Mouse		+++	nd	+++
Immunogen	+			

nd: not determined

## **USAGE**

Working concentrations for specific applications should be determined by the investigator. Appropriate concentrations will be affected by several factors, including secondary antibody affinity, antigen concentration, sensitivity of detection method, temperature and length of incubations, etc. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Immunohistochemistry\*: 5-10 μg/mL Immunoprecipitation: 5 μg / IP Western blotting: 2-4 μg/mL

## **STORAGE**

PI321700

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 large family of Ca<sup>2+</sup>-dependent cell-cell adhesion molecules. All cadherins are single-pass transmembrane proteins with a variable number of 110 amino acid extracellular cadherin (EC) domains. Classical cadherins contain five EC domains and a conserved cytoplasmic domain. Based on amino acid alignment, classical cadherins are divided into type I and type II subgroups. Type I cadherins, including cadherins E (epithelial), N (neural), P (placental), and R (retinal) cadherin differ from type I cadherins in their specific amino acid sequences. Type II cadherins include human cadherin-5, -6, -8, -11, and -12. Cadherin 11 (OB-Cadherin) is a marker of the loosely connected and migratory cellular elements of the mesenchyme. Strong expression of Cadherin 11 has been noted in brain, spinal cord, bone marrow and bone cells, and is regulated in human endometrial glandular epithelial and stromal cells. (1) A variant cadherin-11 gene (variant form) encodes a truncated protein with an unusual cytoplasmic domain not present in other cadherins. (1) The variant protein is generated by alternative splicing, utilizing a 179 bp intronic sequence.

Recently, Cadherin-11 mRNA and protein were found to be expressed in most invasive breast cancer cell lines tested but not in non-invasive cell lines, suggesting that cadherin-11 may be a marker for aggressive, invasive tumor subsets. (2)

(cont'd)

(Rev 10/08) DCC-08-1089

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: <u>techsupport@invitrogen.com</u>

**Important Licensing Information** - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, <a href="https://www.invitrogen.com">www.invitrogen.com</a>). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

<sup>\*</sup> For Immunohistochemistry of frozen sections, incubate 30-60 minutes at room temperature or overnight at 4°C.

## **REFERENCES**

- 1. Okazaki M, et al., J Biol Chem 269(16):12092-8 (1994).
- 2. Pishvaian MJ et al., Cancer Res 59(4):947-52 (1999).

# **RELATED PRODUCTS**

Product	Conjugate	Cat. No.
Protein A	Sepharose 4B	10-1041
rec-Protein G	Sepharose 4B	10-1241
ZyMAX™ Goat anti-rabbit IgG	Unconjugated	81-6100
ZyMAX™ Goat anti-mouse IgG	Unconjugated	81-6500

Secondary antibody conjugates.

Conjugate	Goat anti-rabbit lgG (H+L)	Goat anti-mouse IgG (H+L)	Ex/Em*	Fluorescence similar to
Alexa Fluor® 488	A11008	A11001	495/519	FITC
Alexa Fluor® 555	A21428	A21422	555/565	Cy3
Alexa Fluor® 594	A11012	A11005	590/617	Texas Red
Alexa Fluor® 647	A21244	A21235	650/668	Cy5
HRP	81-6120	81-6520	NA**	NA
AP	81-6122	81-6522	NA	NA
Biotin	B2770	B2763	NA	NA

<sup>\*</sup>Excitation/emission (nm); \*\*Not applicable

For additional secondary antibody conjugates, visit www.invitrogen.com/antibodies

# For Research Use Only