

Datasheet for ABIN335398
anti-E-cadherin antibody



[Go to Product page](#)

1 Image **3** Publications

Overview

Quantity:	0.1 mg
Target:	E-cadherin (CDH1)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This E-cadherin antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Flow Cytometry (FACS), Immunocytochemistry (ICC), Immunohistochemistry (Frozen Sections) (IHC (fro))

Product Details

Immunogen:	MB2 is a mouse monoclonal IgG2b antibody derived by fusion of NS0 mouse myeloma cells with spleen cells from a BABL/c mouse immunized with MCF-7/AZ cells expressing E-cadherin at their cell surface.
Clone:	MB2
Isotype:	IgG2b
Specificity:	Human.
Purification:	Purified

Target Details

Target:	E-cadherin (CDH1)
Alternative Name:	E-Cadherin / Cadherin-1 (CDH1 Products)

Target Details

Background: Cadherins constitute a family of transmembrane glycoproteins involved in Ca^{2+} -dependent cell-cell interactions. The members of this family are differentially expressed in various tissues. They function in the maintenance of tissue integrity and morphogenesis. Cadherins are divided into type I and type II subgroups. Type I cadherins include epithelial cadherin (E-cadherin, cadherin-1 or uvomorulin), neural cadherin (N-cadherin or cadherin-2), placental cadherin (P-cadherin or cadherin-3) and retinal cadherin (R-cadherin or cadherin-4), whereas kidney cadherin (K-cadherin or cadherin-6) and osteoblast cadherin (OB-cadherin or cadherin-11) are type II cadherins. One of the best characterized cadherins is E-cadherin, a 120 kD transmembrane glycoprotein consisting of an 80 kD extracellular and a 40 kD transmembrane and cytoplasmic part. The extracellular domains of E-cadherin are responsible for calcium binding which allows for homophilic interaction with other E-cadherin molecules on the same cell and neighbouring cells. In addition, E-cadherin can interact heterophilically with integrin $\alpha 5 \beta 1$. The cytoplasmic domain of E-cadherin is linked to the actin cytoskeleton through the associated cytoplasmic catenin proteins, thus establishing a complex localized to adherens junctions. In carcinomas E-cadherin is frequently downregulated, which is consistent with its function of an invasion suppressor in normal epithelia.

Pathways: [WNT Signaling](#), [Sensory Perception of Sound](#), [Cell-Cell Junction Organization](#), [Tube Formation](#)

Application Details

Application Notes: MB2 recognizes both the 120 kD E-cadherin and its 80 kD trypsin-resistant extracellular part. MB2 is a functional antibody in that it inhibits cell-cell adhesion. MB2 is useful for flow cytometry, immunoblotting, immunocytochemistry on fixed cells (methanol fixation) and immunohistochemistry on frozen tissues when using a PBS buffer containing 0.1 mM CaCl_2 and 0.1 mM MgCl_2 . Optimal antibody dilution should be determined by titration, recommended range is 1:100 - 1:200 for flow cytometry, and for immunohistochemistry with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent, and 1:100 - 1:1000 for immunoblotting applications.

Restrictions: For Research Use only

Handling

Storage: 4 °C

Publications

Product cited in: Rong, Boterberg, Maubach, Stove, Depypere, Van Slambrouck, Serreyn, De Keukeleire, Mareel,

Bracke: "8-Prenylnaringenin, the phytoestrogen in hops and beer, upregulates the function of the E-cadherin/catenin complex in human mammary carcinoma cells." in: **European journal of cell biology**, Vol. 80, Issue 9, pp. 580-5, (2001) ([PubMed](#)).

Steelant, Goeman, Philippé, Oomen, Hilkens, Krzewinski-Recchi, Huet, Van der Eycken, Delannoy, Bruyneel, Mareel: "Alkyl-lysophospholipid 1-O-octadecyl-2-O-methyl-glycerophosphocholine induces invasion through episialin-mediated neutralization of E-cadherin in human mammary MCF-7 cells in vitro." in: **International journal of cancer. Journal international du cancer**, Vol. 92, Issue 4, pp. 527-36, (2001) ([PubMed](#)).

Bracke, Vyncke, Bruyneel, Vermeulen, De Bruyne, Van Larebeke, Vleminckx, Van Roy, Mareel: "Insulin-like growth factor I activates the invasion suppressor function of E-cadherin in MCF-7 human mammary carcinoma cells in vitro." in: **British journal of cancer**, Vol. 68, Issue 2, pp. 282-9, (1993) ([PubMed](#)).

Images

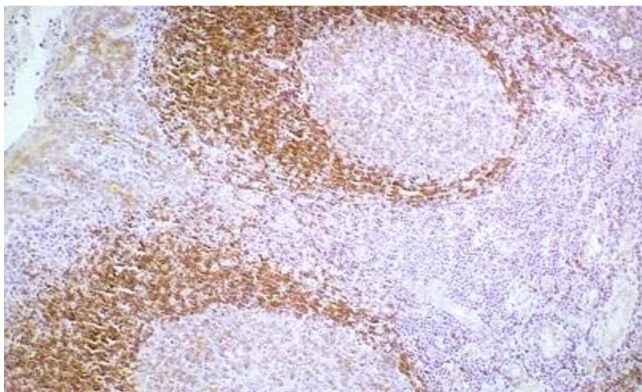


Image 1.