

## Product datasheet for **BM6016P**

### E Cadherin (CDH1) Mouse Monoclonal Antibody [Clone ID: MB2]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	MB2
Applications:	FC, IF, IHC, WB
Recommended Dilution:	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 <sub>2</sub> and 0.1 mM MgCl <sub>2</sub> . <i>Recommended Dilutions:</i> Immunoblotting: 1/100-1/1000. Flow Cytometry: 1/100-1/200. Immunohistochemistry: 1/100-1/200 with avidin-biotinylated horseradish peroxidase complex (ABC) as detection reagent.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
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.
Specificity:	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.
Formulation:	PBS State: Purified State: Liquid purified IgG fraction Preservative: 0.09% Sodium Azide
Concentration:	lot specific
Conjugation:	Unconjugated
Storage:	Store the antibody (undiluted) at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freeze-thaw cycles.
Stability:	Shelf life: One year from despatch.



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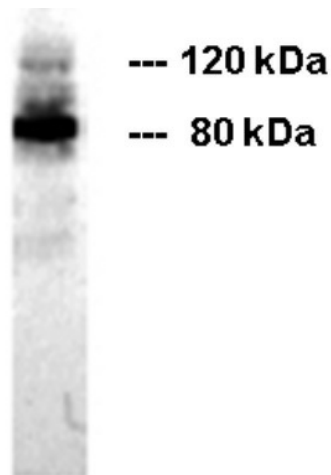
Gene Name: cadherin 1

Database Link: [Entrez Gene 999 Human P12830](#)

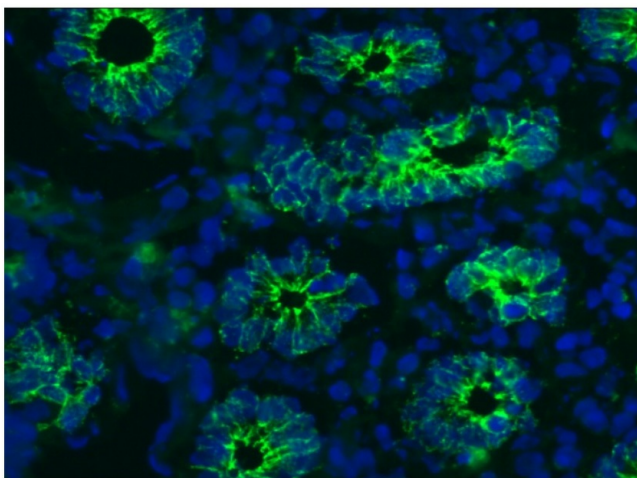
**Background:** Cadherins constitute a family of transmembrane glycoproteins involved in Ca<sup>2+</sup>-dependent cell-cell interactions. The members of this family are differentially expressed in various tissues. They function in the maintenance of tissue integrity and morphogenesis. Cadherins are 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  $\alpha\beta 7$ . 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 down-regulated, which is consistent with its function of an invasion suppressor in normal epithelia.

**Synonyms:** Epithelial cadherin, E-cadherin, Uvomorulin, CAM 120/80, CDH1, CDHE, UVO

**Product images:**



Western blot on MCF-7 cellular extract: moderate reactivity with the 120 kDa full length protein and strong reactivity with the 80 kDa extracellular part of E-Cadherin.



Immunohistochemistry on Frozen Sections of small intestine: positive staining of the cell-cell adhesion molecules between the epithelial cells of the crypts.