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Anti-E-Cadherin (CDH1) Rabbit Monoclonal Antibody

Rabbit Monoclonal Antibody
Catalog # ABV11820

Product Information

Application	WB, IHC
Primary Accession	P12830
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	97456

Additional Information

Gene ID	999
Positive Control	WB: MCF-7 cells; IHC: human breast cancer tissues
Application & Usage	IHC: 1:500 -1:1000 dilution; WB: 1:1000 - 1:2000 dilution
Alias Symbol	CDH1
Other Names	P-cadherin, N-Cadherin, E-Cadherin, K-Cadherin, M-jadherin, R-Cadherin
Appearance	Colorless liquid
Formulation	In 50% Glycerol/PBS with 1% BSA and 0.09% sodium azide
Reconstitution & Storage	-20 °C
Background Descriptions	
Precautions	Anti-E-Cadherin (CDH1) Rabbit Monoclonal Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

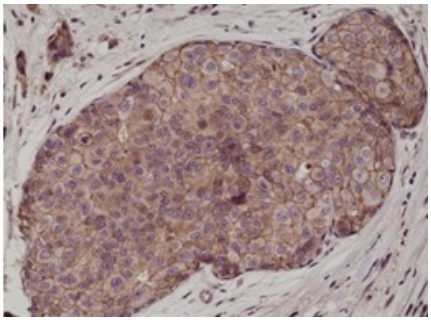
Name	CDH1 (HGNC:1748)
Function	Cadherins are calcium-dependent cell adhesion proteins (PubMed:11976333). They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. CDH1 is involved in mechanisms regulating cell-cell adhesions, mobility and proliferation of epithelial cells (PubMed:11976333). Promotes organization of radial actin fiber structure and cellular response to contractile forces, via its interaction with AMOTL2 which facilitates anchoring of radial actin fibers to CDH1 junction complexes at the cell membrane (By similarity). Plays a role in the early stages of desmosome cell-cell junction formation via facilitating the recruitment of DSG2 and DSP to

	desmosome plaques (PubMed:29999492). Has a potent invasive suppressor role. It is a ligand for integrin alpha-E/beta-7.
Cellular Location	Cell junction, adherens junction. Cell membrane; Single-pass type I membrane protein Endosome. Golgi apparatus, trans-Golgi network. Cytoplasm. Cell junction, desmosome. Note=Colocalizes with DLGAP5 at sites of cell-cell contact in intestinal epithelial cells. Anchored to actin microfilaments through association with alpha-, beta- and gamma- catenin. Sequential proteolysis induced by apoptosis or calcium influx, results in translocation from sites of cell-cell contact to the cytoplasm. Colocalizes with RAB11A endosomes during its transport from the Golgi apparatus to the plasma membrane. Recruited to desmosomes at the initial assembly phase and also accumulates progressively at mature desmosome cell-cell junctions (PubMed:25208567, PubMed:29999492) Localizes to cell-cell contacts as keratinocyte differentiation progresses (By similarity). {ECO:0000250|UniProtKB:P09803, ECO:0000269|PubMed:25208567, ECO:0000269|PubMed:29999492}
Tissue Location	Expressed in granuloma macrophages (at protein level) (PubMed:27760340). Expressed in the skin (at protein level) (PubMed:22294297). Expressed in the liver (PubMed:3263290)

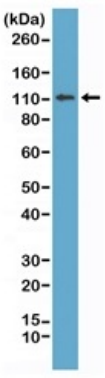
Background

Cadherins comprise a family of Ca-dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of tissue structure and morphogenesis. Cadherins consist of large extracellular domains characterized by a series of five homologous NH2 terminal repeats. The most distal of cadherins is thought to be responsible for binding specificity, transmembrane domains and carboxy terminal domains. The relative short intracellular domains interact with a variety of cytoplasmic proteins, such as β-catenin, to regulate cadherin function.

Images



Immunohistochemical staining of formalin fixed and paraffin embedded human breast cancer tissue sections using anti-E-cadherin monoclonal antibody at 1:1000 dilution.



Western blot of MCF-7 cells lysates using anti-E-cadherin monoclonal antibody at 1:1000 dilution, showed a band of E-cadherin (~120kDa) expressed in MCF-7 cells.