10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-E-Cadherin / CD324 Antibody

Mouse Monoclonal Antibody
Catalog # AH13656

Product Information

Application	WB, IHC-P, IF, FC
Primary Accession	P12830
Other Accession	461086
Reactivity	Human, Rat
Host	Mouse
Clonality	Monoclonal
Isotype	Mouse / IgG1, kappa
Clone Names	CDH1/1525
Calculated MW	97456

Additional Information

Gene ID	999
Other Names	Arc 1; cadherin 1 type 1 E-cadherin; Cadherin1; CAM 120/80; CD324; CDH1; CDHE; E-Cad/CTF3; E-cadherin; ECAD; Epithelial cadherin; epithelial calcium dependent adhesion protein; Liver cell adhesion molecule (LCAM); Uvomorulin (UVO)
Application Note	Flow Cytometry (0.5-1ug/million cells); Immunofluorescence (0.5-1ug/ml); ,Western Blotting (0.5-1ug/ml); ,Immunohistology (Formalin-fixed) (1-2ug/ml for 30 minutes at RT),(Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes),Optimal dilution for a specific application should be determined.
Format	200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Anti-E-Cadherin / CD324 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}

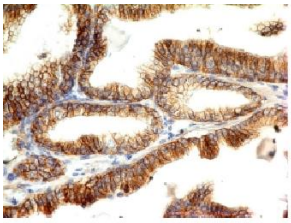
Tissue Location

Expressed in granuloma macrophages (at protein level) (PubMed:27760340). Expressed in the skin (at protein level) (PubMed:22294297). Expressed in the basal epithelial layer of the esophageal epithelium (at protein level) (PubMed:24220297). Expressed in the liver (PubMed:3263290).

Background

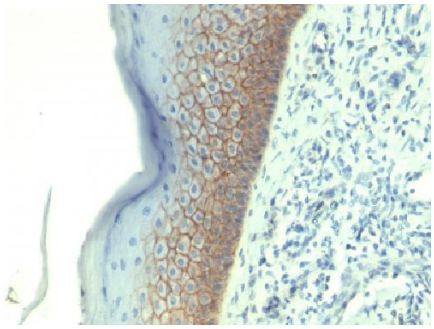
Recognizes a protein of 120-80kDa, identified as E-cadherin. Cadherins comprise a family of Ca2+-dependent adhesion molecules that function to mediate cell-cell binding critical to the maintenance of tissue structure and morphogenesis. The classical cadherins, E-, N- and P-cadherin, consist of large extracellular domains characterized by a series of five homologous NH2 terminal repeats. The relatively short intracellular domains interact with a variety of cytoplasmic proteins, such as β-catenin, to regulate cadherin function. E-cadherin plays an important role in epithelial cell adhesion. A decreased expression of E-cadherin is associated with metastatic potential and poor prognosis in breast cancer, prostate and esophageal cancer. In combination with p120 Catenin, it is useful for the differentiation between ductal (E-cadherin +) and lobular (E-cadherin -) breast carcinomas. It may also help in diagnosis of mesothelioma.

Images

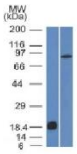


Formalin-fixed, paraffin-embedded human Colon Carcinoma stained with E-Cadherin Monoclonal Antibody (CDH1/1525).

Formalin-fixed, paraffin-embedded human Skin stained

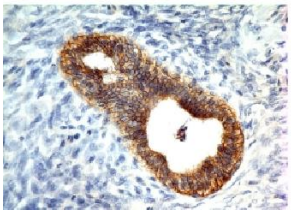


with E-Cadherin Monoclonal Antibody (CDH1/1525).



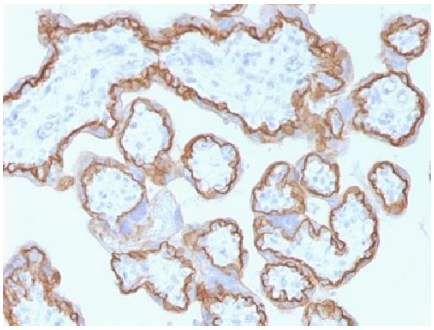
Western Blot Analysis (A) Recombinant Protein (B) human Stomach lysate Using E-Cadherin Monoclonal Antibody (CDH1/1525).

Formalin-paraffin human Colon Carcinoma stained with E-Cadherin MAb (CDH1/1525).





Formalin-paraffin human Prostate Carcinoma stained with E-Cadherin MAb (CDH1/1525).



Formalin-paraffin human Placenta stained with E-Cadherin MAb (CDH1/1525).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.