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

Anti-E-Cadherin Antibody

Catalog # ABO12248

Specification

Anti-E-Cadherin Antibody - Product Information

Application	**WB, IHC-P, IHC-F, E**
Primary Accession	P12830
Host	**Rabbit**
Reactivity	**Human**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Cadherin-1(CDH1) detection. Tested with WB, IHC-P, IHC-F, ELISA in Human.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-E-Cadherin Antibody - Additional Information

Gene ID 999

Other Names
Cadherin-1, CAM 120/80, Epithelial cadherin, E-cadherin, Uvomorulin, CD324, E-Cad/CTF1, E-Cad/CTF2, E-Cad/CTF3, CDH1, CDHE, UVO

Calculated MW
97456 MW KDa

Application Details
ELISA , 0.1-0.5 µg/ml, Human, -
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Human, -
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization
Cell junction. Cell membrane; Single-pass type I membrane protein. Endosome. Golgi apparatus, trans-Golgi network. 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.

Tissue Specificity
Non-neural epithelial tissues.

Protein Name
Cadherin-1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen
E.coli-derived human E Cadherin recombinant protein (Position: A286-A703). Human E Cadherin shares 79.7% and 80.9% amino acid (aa) sequence identity with mouse and rat E Cadherin, respectively.

Purification
Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage

At -20˚C for one year. After r˚Constitution, at 4˚C for one month. It˚Can also be aliquotted and stored frozen at -20˚C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities
Contains 5 cadherin domains.

Anti-E-Cadherin Antibody - 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)

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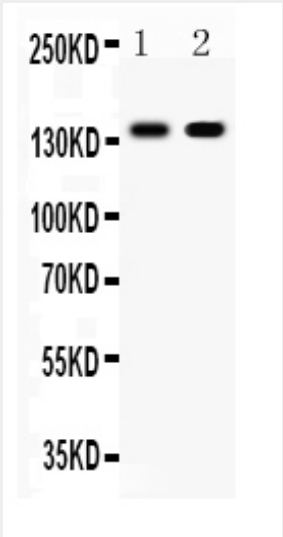
Anti-E-Cadherin Antibody - Protocols

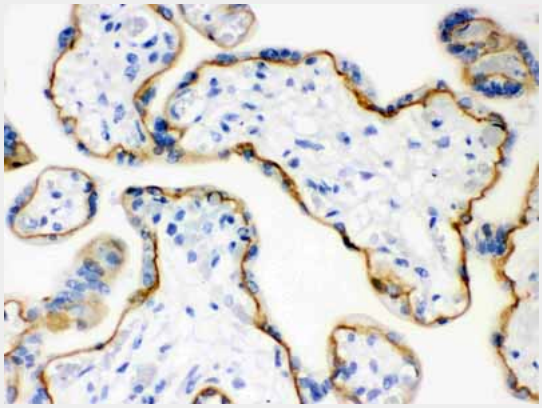
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-E-Cadherin Antibody - Images



Anti- E Cadherin Picoband antibody, ABO12248, Western blottingAll lanes: Anti E Cadherin (ABO12248) at 0.5ug/mlLane 1: Human Placenta Tissue Lysate at 50ugLane 2: HELA Whole Cell Lysate at 40ugPredicted bind size: 140KDObserved bind size: 140KD



Anti- E Cadherin Picoband antibody, ABO12248, IHC(P)IHC(P): Human Placenta Tissue

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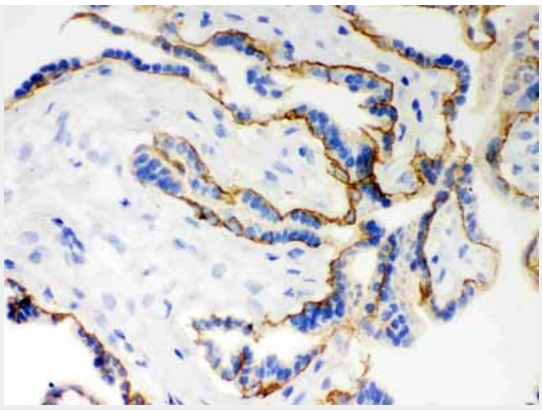

Anti- E Cadherin Picoband antibody, ABO12248, IHC(F)IHC(F): Human Placenta Tissue

Anti-E-Cadherin Antibody - Background

CDH1 (Cadherin 1), also known as ECAD or UVO, is a protein that in humans is encoded by the CDH1 gene. Cadherin-1 is a classical member of the cadherin superfamily. By Southern analysis of DNA from a panel of mouse-human somatic cell hybrids, Mansouri et al. (1987, 1988) assigned the UVO gene to 16q (16p11-qter). Frebourg et al. (2006) found that in human embryos CDH1 is highly expressed at 4 and 5 weeks in the frontonasal prominence and at 6 weeks in the lateral and medial nasal prominences, and is therefore expressed during critical stages of lip and palate development. CDH1 is involved in mechanisms regulating cell-cell adhesions, mobility and proliferation of epithelial cells. Has a potent invasive suppressor role. It is a ligand for integrin alpha-E/beta-7.