

E Cadherin (CDH1) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1477b

Specification

E Cadherin (CDH1) Antibody (C-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW Antigen Region FC, WB,E P12830 Human Rabbit Polyclonal Rabbit IgG 97456 833-862

E Cadherin (CDH1) Antibody (C-term) - 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

Target/Specificity

This E Cadherin (CDH1) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 833-862 amino acids from the C-terminal region of human E Cadherin (CDH1).

Dilution FC~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

E Cadherin (CDH1) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

E Cadherin (CDH1) Antibody (C-term) - Protein Information

Name CDH1 (<u>HGNC:1748</u>)



Function Cadherins are calcium-dependent cell adhesion proteins (PubMed:<u>11976333</u>). 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:<u>11976333</u>). 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:<u>29999492</u>). 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)

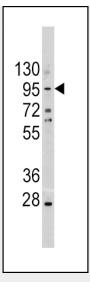
E Cadherin (CDH1) Antibody (C-term) - Protocols

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

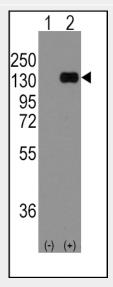
- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

E Cadherin (CDH1) Antibody (C-term) - Images



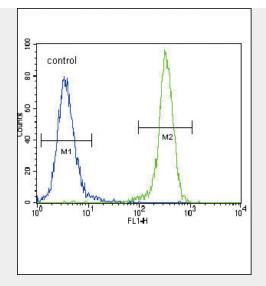


Western blot analysis of CDH1 Antibody (C-term) (Cat.#AP1477b) in A375 cell line lysates (35ug/lane). CDH1 (arrow) was detected using the purified Pab.



Western blot analysis of CDH1 (arrow) using rabbit polyclonal CDH1 Antibody (C-term) (Cat.#AP1477b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the CDH1 gene (Lane 2) (Origene Technologies).





E Cadherin (CDH1) Antibody (C-term) (Cat. #AP1477b) flow cytometric analysis of 293 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

E Cadherin (CDH1) Antibody (C-term) - Background

CDH1 is a classical cadherin from the cadherin superfamily. This protein is a calcium dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Mutations are correlated with gastric, breast, colorectal, thyroid and ovarian cancer. Loss of function is thought to contribute to progression in cancer by increasing proliferation, invasion, and/or metastasis. The ectodomain of this protein mediates bacterial adhesion to mammalian cells and the cytoplasmic domain is required for internalization.

E Cadherin (CDH1) Antibody (C-term) - References

Mansouri,A., Differentiation 38 (1), 67-71 (1988) Knudsen,K.A. J. Cell Biol. 118 (3), 671-679 (1992) Hsu,Y.M., Cancer Res. 67 (22), 11064-11073 (2007)