

CADH1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8528b

Specification

CADH1 Antibody - Product Information

Application	IF, WB, IHC-P,E
Primary Accession	P12830
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG1, κ
Calculated MW	97456

CADH1 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

Target/Specificity

This CADH1 antibody is generated from a mouse immunized with a recombinant protein between 1-392 amino acids from human CADH1.

Dilution

IF~~1:25

WB~~1:4000

IHC-P~~1:25

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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

CADH1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CADH1 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). 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). Localizes to cell-cell contacts as keratinocyte differentiation progresses (By similarity)
{ECO:0000250|UniProtKB:P09803, ECO:0000269|PubMed:25208567}

Tissue Location

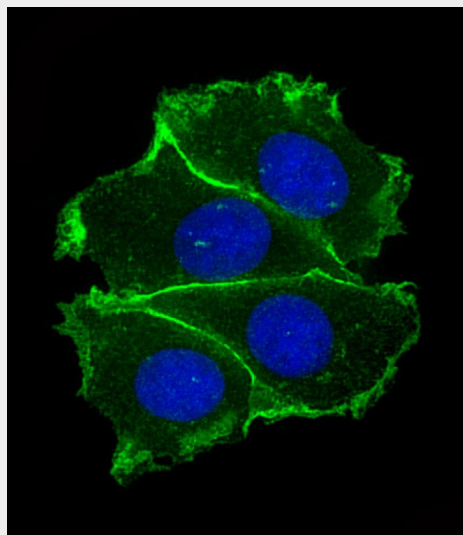
Expressed in granuloma macrophages (at protein level) (PubMed:27760340). Expressed in the skin (at protein level) (PubMed:22294297). Expressed in the liver (PubMed:3263290)

CADH1 Antibody - Protocols

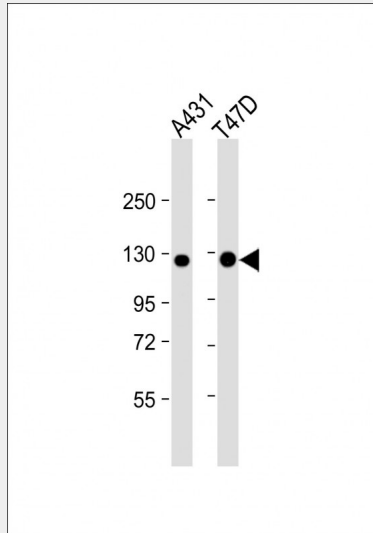
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

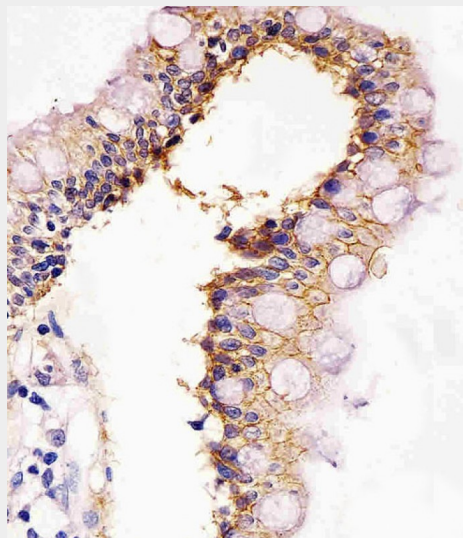
CADH1 Antibody - Images



Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized MCF-7 (human breast cancer cell line) cells labeling CADH1 with AM8528b at 1/25 dilution, followed by Dylight® 488-conjugated goat anti-mouse IgG (NA166821) secondary antibody at 1/200 dilution (green). Immunofluorescence image showing membrane and weak cytoplasm staining on MCF-7 cell line. The nuclear counter stain is DAPI (blue).



All lanes : Anti-CADH1 Antibody at 1:4000 dilution Lane 1: A431 whole cell lysate Lane 2: T47D whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 97 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



AM8528b staining CADH1 in human colon tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0.5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hour at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

CADH1 Antibody - Background

Cadherins are calcium-dependent cell adhesion proteins. 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. Has a potent invasive suppressor role. It is a ligand for integrin alpha-E/beta-7.

CADH1 Antibody - References

- Bussemakers M.J.G.,et al.Mol. Biol. Rep. 17:123-128(1993).
Oda T.,et al.Proc. Natl. Acad. Sci. U.S.A. 91:1858-1862(1994).
Rimm D.L.,et al.Biochem. Biophys. Res. Commun. 200:1754-1761(1994).
Ito K.,et al.Oncogene 18:7080-7090(1999).
Shibamoto S.,et al.Submitted (MAR-1999) to the EMBL/GenBank/DDBJ databases.