

CDH1 Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM2190b

Specification

CDH1 Antibody - Product Information

| | |
|-------------------|------------------------|
| Application | WB, IHC-P,E |
| Primary Accession | P12830 |
| Reactivity | Human, Mouse |
| Host | Mouse |
| Clonality | Monoclonal |
| Isotype | IgG1,k |
| Calculated MW | 97456 |

CDH1 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

Purified His-tagged CDH1 protein was used to produced this monoclonal antibody.

Dilution

WB~~1:4000

IHC-P~~1:25

E~~Use at an assay dependent concentration.

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

CDH1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

CDH1 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

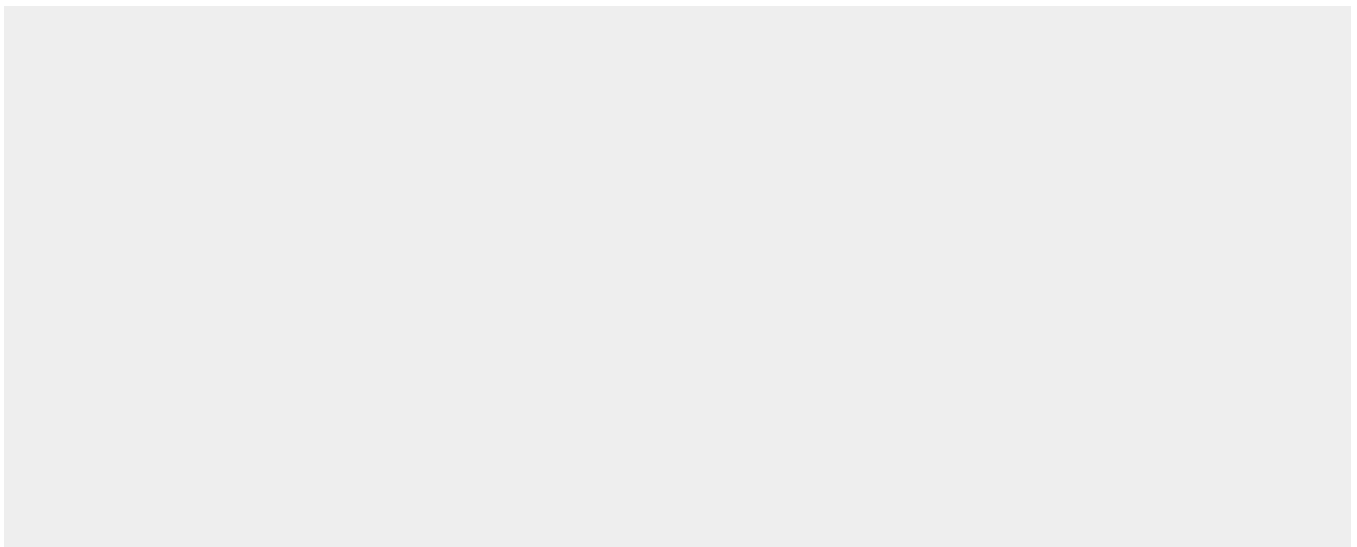
Expressed in granuloma macrophages (at protein level) (PubMed:27760340). Expressed in the skin (at protein level) (PubMed:22294297). Expressed in the liver (PubMed:3263290)

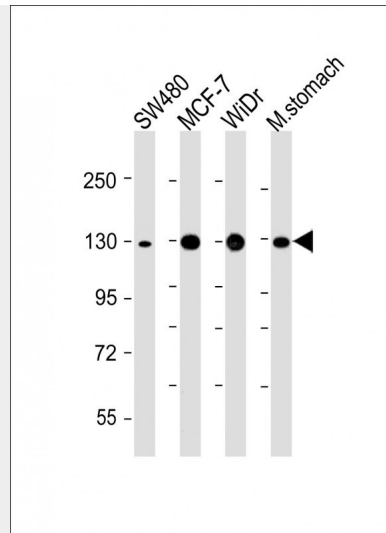
CDH1 Antibody - Protocols

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

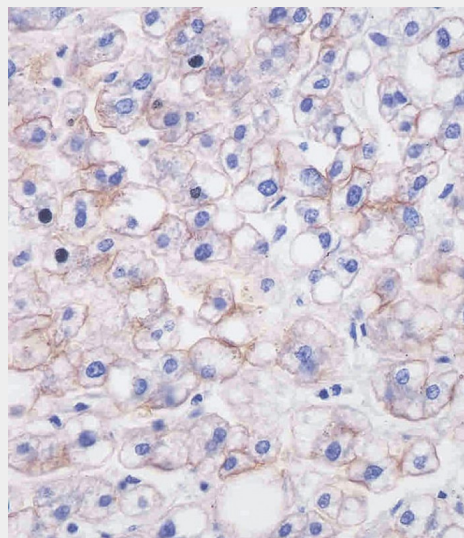
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

CDH1 Antibody - Images





All lanes : Anti-CDH1 at 1:4000 dilution Lane 1: SW480 whole cell lysate Lane 2: MCF-7 whole cell lysate Lane 3: WiDr whole cell lysate Lane 4: Mouse stomach lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 98 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



AM2190b staining CDH1 in human liver 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 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.

CDH1 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.

E-Cad/CTF2 promotes non-amyloidogenic degradation of Abeta precursors. Has a strong inhibitory effect on APP C99 and C83 production.

CDH1 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).
Bussemakers M.J.G., et al. Biochem. Biophys. Res. Commun. 203:1284-1290(1994).

CDH1 Antibody - Citations

- [TALENs-directed knockout of the full-length transcription factor Nrf1 \$\alpha\$ that represses malignant behaviour of human hepatocellular carcinoma \(HepG2\) cells.](#)