

CDH1 Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1473a**Specification**

CDH1 Antibody - Product Information

Application	WB, IHC, FC
Primary Accession	P12830
Reactivity	Human, Mouse, Monkey
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	135kDa KDa

Description

E-Cadherin is a 120 kDa transmembrane glycoprotein that is localized in the adherens junctions of epithelial cells. There, it interacts with the cytoskeleton through the associated cytoplasmic catenin proteins. In addition to being a calcium-dependent adhesion molecule, E-Cadherin is also a critical regulator of epithelial junction formation. Its association with catenins is necessary for cell-cell adhesion. These E-cadherin/catenin complexes associate with corical actin bundles at both the zonula adherens and the lateral adhesion plaques. Tyrosine phosphorylation can disrupt these complexes, leading to changes in cell adhesion properties. E-Cadherin expression is often down-regulated in highly invasive, poorly differentiated carcinomas. Increased expression of E-Cadherin in these cells reduces invasiveness. Thus, loss of expression or function of E-Cadherin appears to be an important step in tumorigenic progression. Tissue specificity: Non-neural epithelial tissues.

Immunogen

Purified recombinant fragment of human CDH1 expressed in E. Coli.

Formulation

Ascitic fluid containing 0.03% sodium azide.

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

Dilution

WB~~1/500 - 1/2000

IHC~~1/200 - 1/1000

FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. 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

Synonyms CDHE, UVO

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). 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. 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

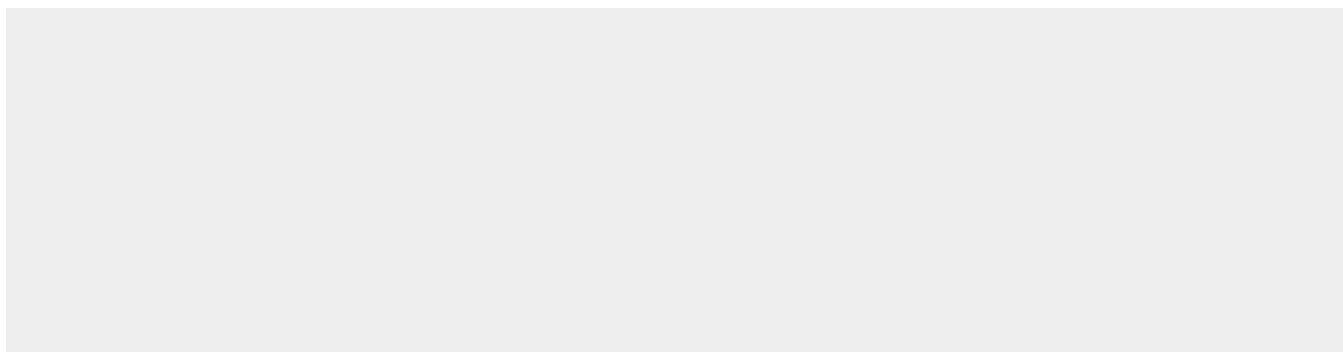
Tissue Location

Non-neural epithelial tissues.

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

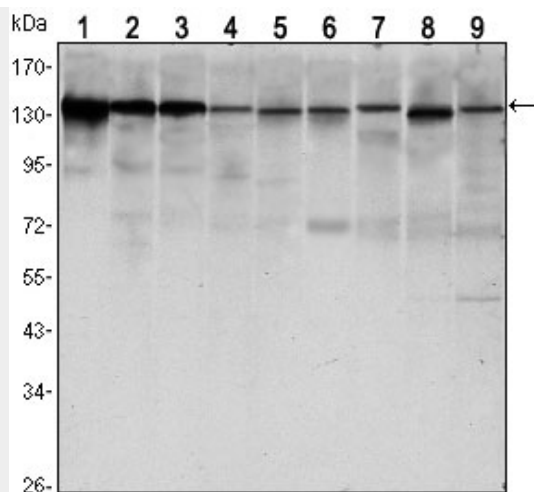


Figure 1: Western blot analysis using CDH1 mouse mAb against LNCAP (1) A431 (2), DU145 (3), PC-3 (4), MCF-7 (5), PC-12 (6), NIH/3T3 (7), C6 (8) and COS7 (9) cell lysate.

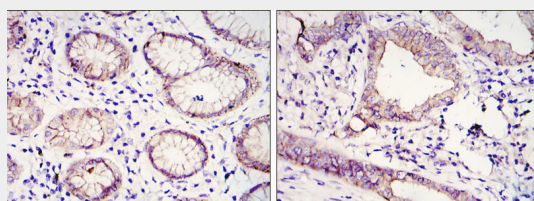


Figure 2: Immunohistochemical analysis of paraffin-embedded gastric cancer tissues (left) and lung cancer tissues (right) using CDH1 mouse mAb with DAB staining.

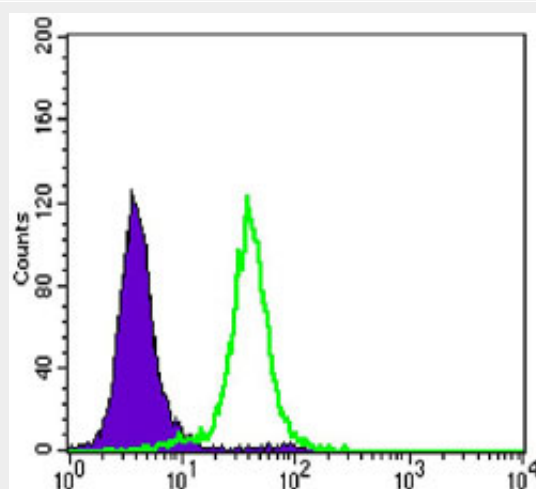


Figure 3: Flow cytometric analysis of HeLa cells using CDH1 mouse mAb (green) and negative control (purple).

CDH1 Antibody - References

1. Nat Genet. 2009 Dec;41(12):1330-4. 2. Zhonghua Zhong Liu Za Zhi. 2009 Jul;31(7):515-9. 3. J Biol Chem. 2010 Feb 26;285(9):6658-69.