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CDH1 Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AW5389

Product Information

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

Additional Information

Gene ID	999
Antigen Region	292-587
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	IHC-P~~1:100~500 WB~~1:1000
Target/Specificity	Purified His-tagged CDH1 protein was used to produced this monoclonal antibody.
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.

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)

Background

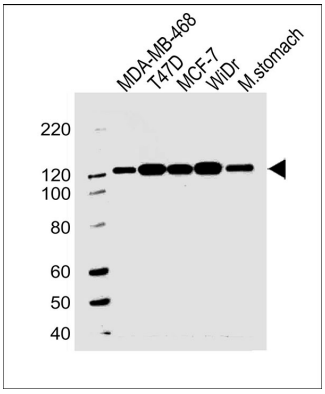
Cadherins are calcium-dependent cell adhesion proteins. They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the sorting of heterogeneous cell types. CDH1 is involved in mechanisms regulating cell-cell adhesions, mobility and proliferation 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.

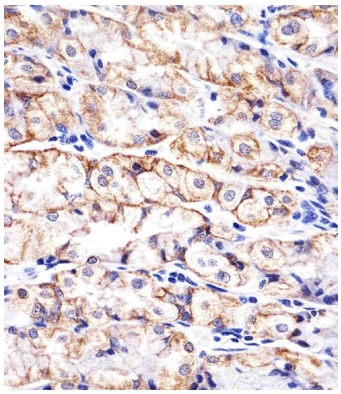
References

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).

Images

All lanes : Anti-CDH1 Antibody at 1:1000 dilution Lane 1: MDA-MB-468 whole cell lysates Lane 2: T47D whole cell lysates Lane 3: MCF-7 whole cell lysates Lane 4: WiDr whole cell lysates Lane 5: mouse stomach lysates 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% NFDM/TBST.





Immunohistochemical analysis of paraffin-embedded H. stomach section using CDH1 Antibody(Cat#AW5389). AW5389 was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.