

E Cadherin Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51064

Product Information

Application	WB, IHC-P
Primary Accession	P12830
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	97456

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~~1:1000 IHC-P~~N/A
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C. Stable for 12 months from date of receipt

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.

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).
Ota T.,et al.Nat. Genet. 36:40-45(2004).

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