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# Anti-Cadherin-pan Antibody

Catalog # AP53998

## Product Information

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| **Application** | WB, IHC |
| **Primary Accession** | P12830 |
| **Other Accession** | P19022, P22223, P55283, P55285, Q9ULB4 |
| **Reactivity** | Human, Mouse, Rat, Chicken, Bovine, Dog |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 97456 |

## Additional Information

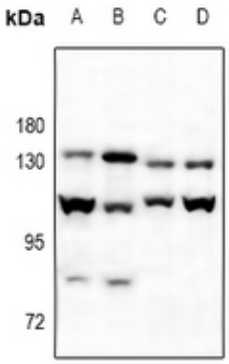
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| **Gene ID** | 999 |
| **Other Names** | CDHE; UVO; Cadherin-1; CAM 120/80; Epithelial cadherin; E-cadherin; Uvomorulin; CD324; CDHN; NCAD; Cadherin-2; CDw325; Neural cadherin; N-cadherin; CD325; CDHP; Cadherin-3; Placental cadherin; P-cadherin |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human Cadherin-pan. The exact sequence is proprietary. |
| **Dilution** | WB~~1/500 - 1/1000 IHC~~1:100~500 |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

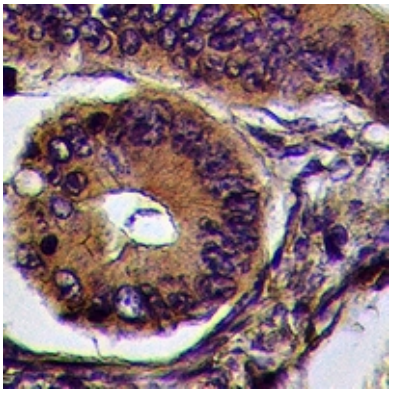
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| **Name** | CDH1 ( HGNC:1748) |
| **Function** | Cadherins are calcium-dependent cell adhesion proteins (PubMed:11976333). They preferentially interact with themselves in a homophilic manner in connecting cells; cadherins may thus contribute to the 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. |

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| **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 basal epithelial layer of the esophageal epithelium (at protein level) (PubMed:24220297). Expressed in the liver (PubMed:3263290). |

## Images




Western blot analysis of Cadherin-pan expression in A375 (A), HepG2 (B), mouse brain (C), rat brain (D) whole cell lysates. (Predicted band size: 97; 99; 91; 100; 88 kD; Observed band size: 120; 130 kD)



Immunohistochemical analysis of Cadherin-pan staining in human colorectal cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.