

## Rabbit pan Cadherin Polyclonal Antibody | anti-CDH1 antibody

pan Cadherin Antibody

| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                              |
|-----------|--------|-------------------|-------------------------------------------|
| AAA327184 | Rabbit | Human, Mouse, Rat | ELISA, Immunohistochemistry, Western Blot |

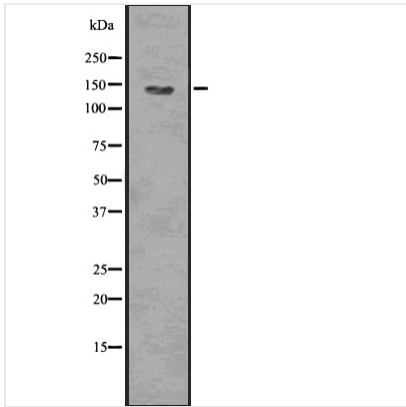
### PRODUCT SYNONYMS

pan Cadherin; Polyclonal Antibody; pan Cadherin Antibody; Arc 1; CADH1\_HUMAN; Cadherin 1; cadherin 1 type 1 E-cadherin; Cadherin1; CAM 120/80; CD 324; CD324; CD324 antigen; cdh1; CDHE; E-Cad/CTF3; E-cadherin; ECAD; Epithelial cadherin; epithelial calcium dependant adhesion protein; LCAM; Liver cell adhesion molecule; UVO; Uvomorulin; anti-CDH1 antibody

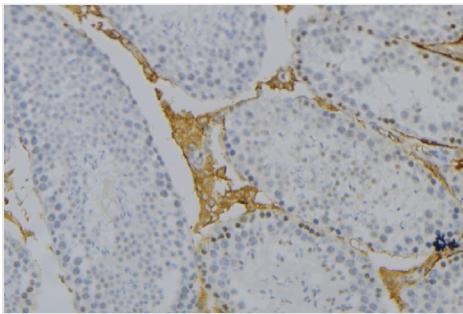
### PRODUCT SPECIFICATIONS

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                           | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Reactivity                                     | Human, Mouse, Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Clonality                                      | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Isotype                                        | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Specificity                                    | pan Cadherin antibody detects endogenous levels of total pan Cadherin                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Purity/Purification                            | The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Form/Format                                    | Liquid<br>Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Concentration                                  | 1mg/ml (varies by lot)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Sequence Length                                | 821                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Applicable Applications for anti-CDH1 antibody | ELISA, IHC (Immunohistochemistry), WB (Western Blot)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Immunogen                                      | A synthesized peptide derived from human pan Cadherin                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Subcellular Location                           | Cell Junction. Cell Membrane. Endosome. Golgi Apparatus > Trans-Golgi network. 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 Specificity                             | Non-neural epithelial tissues.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Conjugation                                    | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Preparation and Storage                        | Store at -20 degree C. Stable for 12 months from date of receipt.                                                                                                                                                                                                                                                                                                                                                                                                                                                |

IMAGES



**WB (Western Blot)**  
Western blot analysis of pan Cadherin using HUVEC whole cell lysates



**IHC (Immunohistochemistry)**  
AAA327184 at 1/100 staining Mouse testis tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

|                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
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| <b>Related Product Information for anti-CDH1 antibody</b> | <p>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.</p> <p>Subunit Structure: Homodimer; disulfide-linked (PubMed:11856755). Component of an E-cadherin/catenin adhesion complex composed of at least E-cadherin/CDH1, beta-catenin/CTNNB1 or gamma-catenin/JUP, and potentially alpha-catenin/CTNNA1; the complex is located to adherens junctions (PubMed:16126725, PubMed:7982500). Interacts with the TRPV4 and CTNNB1 complex (By similarity). Interacts with CTNND1 (PubMed:15240885). The stable association of CTNNA1 is controversial as CTNNA1 was shown not to bind to F-actin when assembled in the complex (By similarity). Alternatively, the CTNNA1-containing complex may be linked to F-actin by other proteins such as LIMA1 (By similarity). Interaction with PSEN1, cleaves CDH1 resulting in the disassociation of cadherin-based adherens junctions (CAJs) (PubMed:11226248, PubMed:16126725). Interacts with AJAP1 and DLGAP5 (PubMed:14699157, PubMed:14595118). Interacts with TBC1D2 (PubMed:20116244). Interacts with LIMA1 (PubMed:18093941). Interacts with CAV1. Interacts with PIP5K1C (PubMed:17261850). Interacts with RAB8B (By similarity). Interacts with RAPGEF2 (By similarity). Interacts with DDR1; this stabilizes CDH1 at the cell surface and inhibits its internalization (PubMed:20432435). Interacts with KLRG1 (PubMed:19604491).</p> <p>Post-translational Modifications: During apoptosis or with calcium influx, cleaved by a membrane-bound metalloproteinase (ADAM10), PS1/gamma-secretase and caspase-3 to produce fragments of about 38 kDa (E-CAD/CTF1), 33 kDa (E-CAD/CTF2) and 29 kDa (E-CAD/CTF3), respectively. Processing by the metalloproteinase, induced by calcium influx, causes disruption of cell-cell adhesion and the subsequent release of beta-catenin into the cytoplasm. The residual membrane-tethered cleavage product is rapidly degraded via an intracellular proteolytic pathway. Cleavage by caspase-3 releases the cytoplasmic tail resulting in disintegration of the actin microfilament system. The gamma-secretase-mediated cleavage promotes disassembly of adherens junctions. N-glycosylation at Asn-637 is essential for expression, folding and trafficking. Ubiquitinated by a SCF complex containing SKP2, which requires prior phosphorylation by CK1/CSNK1A1. Ubiquitinated by CBLL1/HAKAI, requires prior phosphorylation at Tyr-754.</p> <p>Similarity: Three calcium ions are usually bound at the interface of each cadherin domain and rigidify the connections, imparting a strong curvature to the full-length ectodomain.</p> |
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NCBI AND UNIPROT INFORMATION

|                           |                                                                |
|---------------------------|----------------------------------------------------------------|
| NCBI GI #                 | 953768348                                                      |
| NCBI GeneID               | 999                                                            |
| NCBI Accession #          | NP_001304113.1                                                 |
| NCBI GenBank Nucleotide # | NM_001317184.1                                                 |
| UniProt Accession #       | P12830; Q13799; Q14216; Q15855; Q16194; Q4PJ14; Q9UII8; A8K1U7 |

|                                  |                                            |
|----------------------------------|--------------------------------------------|
| Molecular Weight                 | Observed: 140 kDa<br>Predicted: 98 kDa     |
| NCBI Official Full Name          | cadherin-1 isoform 2                       |
| NCBI Official Synonym Full Names | cadherin 1                                 |
| NCBI Official Symbol             | CDH1                                       |
| NCBI Official Synonym Symbols    | UVO; CDHE; ECAD; LCAM; Arc-1; BCDS1; CD324 |
| NCBI Protein Information         | cadherin-1                                 |
| UniProt Protein Name             | Cadherin-1                                 |
| UniProt Gene Name                | <b>CDH1</b>                                |
| UniProt Synonym Gene Names       | CDHE; UVO; E-cadherin                      |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pan-cadherin-antibody-immunohistochemistry-western-blot-elisa/327184>