

Rabbit E-cadherin Polyclonal Antibody | anti-CDH1 antibody

Phospho-E-cadherin (Ser844) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA31444	Rabbit	Human, Mouse, Rat, Monkey Predicted Reactivity: Pig (100%), Bovine (91%), Horse (91%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (83%), Xenopus (100%)	Western Blot, Immunohistochemistry, ELISA

PRODUCT SYNONYMS

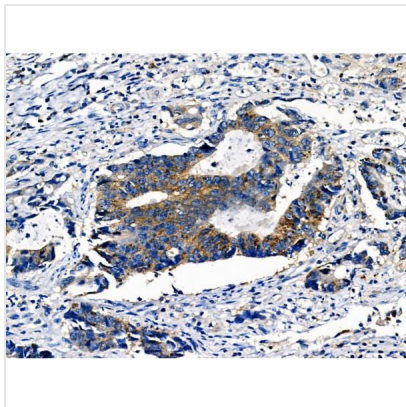
E-cadherin; Polyclonal Antibody; Phospho-E-cadherin (Ser844) Antibody; Arc 1; CADH1_HUMAN; Cadherin 1; cadherin 1 type 1 E-cadherin; Cadherin1; CAM 120/80; CD 324; CD324; CD324 antigen; cdh1; CDHE; E-Cad/CTF3; ECAD; Epithelial cadherin; epithelial calcium dependant adhesion protein; LCAM; Liver cell adhesion molecule; UVO; Uvomorulin; anti-CDH1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat, Monkey Predicted Reactivity: Pig (100%), Bovine (91%), Horse (91%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (83%), Xenopus (100%)
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-E-cadherin (Ser844) Antibody detects endogenous levels of E-cadherin only when phosphorylated at Ser844. Tissue Specificity: Non-neural epithelial tissues.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-CDH1 antibody	WB (Western Blot), IHC (Immunohistochemistry), ELISA (Peptide ELISA)
Application Notes	WB: 1:1000-3000 IHC: 1:50-1:200 Peptide ELISA: 1:20,000-1:40,000
Immunogen	A synthesized peptide derived from human E-cadherin around the phosphorylation site of Ser844.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	During apoptosis or with calcium influx, cleaved by a membrane-bound metalloproteinase (ADAM10), PS1/gamma-secretase and caspase-3. 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. During development of the cochlear organ of Corti, cleavage by ADAM10 at adherens junctions promotes pillar cell separation (By similarity).N-glycosylation at Asn-637 is essential for expression, folding and trafficking. Addition of bisecting N-acetylglucosamine by MGAT3 modulates its cell membrane location.Ubiquitinated by a SCF complex containing SKP2, which requires prior phosphorylation by CK1/CSNK1A1. Ubiquitinated by CBLL1/HAKAI, requires prior phosphorylation at Tyr-754.O-glycosylated. O-mannosylated by TMTC1, TMTC2, TMTC3 or TMTC4. Thr-285 and Thr-509 are O-mannosylated by TMTC2 or TMTC4 but not TMTC1 or TMTC3.

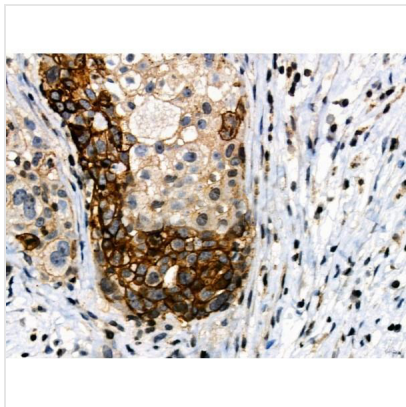
Subunit Structure	Homodimer; disulfide-linked. Component of an E-cadherin/ catenin adhesion complex composed of at least E-cadherin/CDH1, beta-catenin/CTNNB1 or gamma-catenin/JUP, and potentially alpha-catenin/CTNNA1; the complex is located to adherens junctions. Interacts with the TRPV4 and CTNNB1 complex (By similarity). Interacts with CTNND1. 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). Interacts with AJAP1 and DLGAP5. Interacts with TBC1D2. Interacts with LIMA1. Interacts with CAV1. Interacts with PIP5K1C. Interacts with RAB8B (By similarity). Interacts with RAPGEF2 (By similarity). Interacts with DDR1; this stabilizes CDH1 at the cell surface and inhibits its internalization. Interacts with KLRG1. Forms a ternary complex composed of ADAM10, CADH1 and EPHA4; within the complex, CADH1 is cleaved by ADAM10 which disrupts adherens junctions (By similarity). (Microbial infection) Interacts with L.monocytogenes InlA. The formation of the complex between InlA and cadherin-1 is calcium-dependent.
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.
Subcellular 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.
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



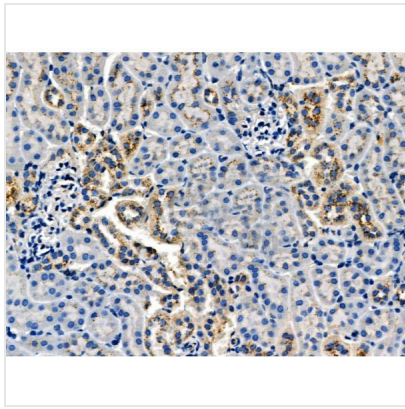
IHC (Immunohistochemistry)

At 1/100 staining Human colorectal cancer 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 primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



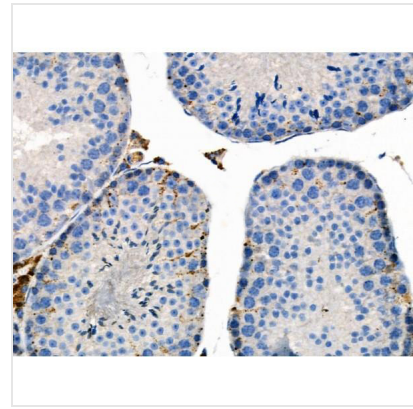
IHC (Immunohistochemistry)

At 1/100 staining Human ovarian cancer 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 primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



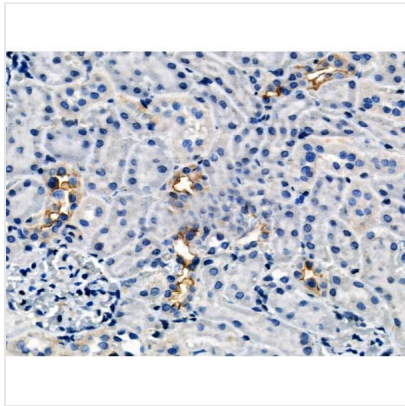
IHC (Immunohistochemistry)

At 1/100 staining Mouse kidney 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 primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



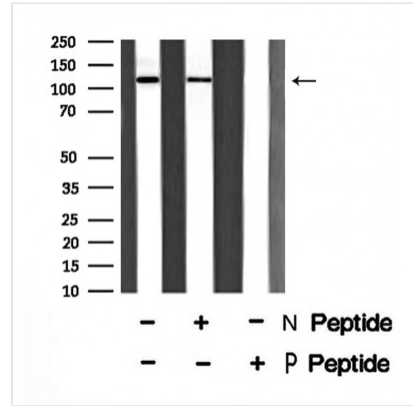
IHC (Immunohistochemistry)

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 primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

Staining Rat kidney 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 primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of CDH1 (Phospho-Ser844) using PI3-kinase H2O2 treated COS7 whole cell lysates. -/+ means absence or presence of N peptide(1/4 non-phospho peptide) and P peptide(phospho peptide).

ADDITIONAL INFORMATION

Related Product Information for anti-CDH1 antibody

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. (Microbial infection) Serves as a receptor for Listeria monocytogenes; internalin A (InIA) binds to this protein and promotes uptake of the bacteria.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4757960
NCBI GeneID	999
NCBI Accession #	NP_004351.1
NCBI GenBank Nucleotide #	NM_004360.3
UniProt Accession #	P12830; Q13799; Q14216; Q15855; Q16194; Q4PJ14; A8K1U7
Molecular Weight	97,456 Da
NCBI Official Full Name	cadherin-1 preproprotein

NCBI Official Synonym Full Names	cadherin 1, type 1, E-cadherin (epithelial)
NCBI Official Symbol	CDH1
NCBI Official Synonym Symbols	UVO; CDHE; ECAD; LCAM; Arc-1; CD324
NCBI Protein Information	cadherin-1; CAM 120/80; E-Cadherin; uvomorulin; cell-CAM 120/80; epithelial cadherin; cadherin 1, E-cadherin (epithelial); calcium-dependent adhesion protein, epithelial
UniProt Protein Name	Cadherin-1
UniProt Gene Name	CDH1
UniProt Synonym Gene Names	CDHE; UVO; E-cadherin
UniProt Entry Name	CADH1_HUMAN

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/e-cadherin-antibody-western-blot-immunohistochemistry-peptide-elisa-elisa/31444>