

Rabbit pan Cadherin Polyclonal Antibody | anti-CDH1 antibody

pan Cadherin Antibody

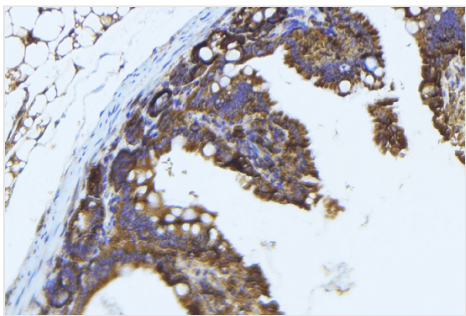
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA323681	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

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; CADH2_HUMAN; Cadherin 2; Cadherin 2 N cadherin neuronal; Cadherin 2 type 1; Cadherin 2 type 1 N cadherin neuronal; type 1; N-cadherin (neuronal); Cadherin-2; Cadherin2; Calcium dependent adhesion protein neuronal; CD325; CD325 antigen; CDH2; CDHN; CDw325; CDw325 antigen; N cadherin 1; N-cadherin; NCAD; Neural cadherin; OTTHUMP00000066304; OTTHUMP00000067378; CADH3_HUMAN; Cadherin 3; Cadherin 3 precursor; Cadherin 3 type 1; Cadherin-3; Cadp; Calcium dependent adhesion protein placental; CDH 3; CDH3; CDH3 protein; CDHP; HJMD; P cadherin (placental); P-cadherin; PCAD; Placental cadherin; 7B 4; 7B4; 7B4 antigen; CADH5_HUMAN; Cadherin 5; Cadherin 5 type 2; type 2 (vascular endothelium); type 2; VE cadherin (vascular epithelium); cadherin; vascular endothelial; 1; Cadherin-5; Cadherin5; CD 144; CD144; CD144 antigen; CDH 5; CDH5; CDH5 protein; Endothelial specific cadherin; FLJ17376; OTTHUMP00000174777; Vascular endothelial cadherin; Vascular epithelium cadherin; VE Cad; VE-cadherin; VEC; CADH4_HUMAN; Cadherin 4; Cadherin-4; cdh4; R CAD; R-CAD; R-cadherin; Retinal cadherin; anti-CDH1 antibody

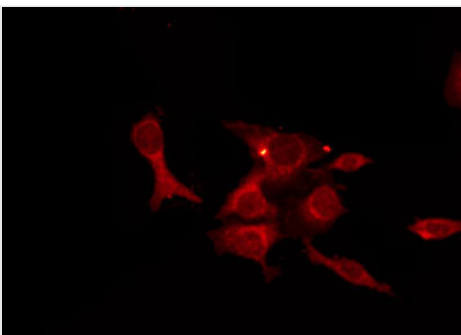
PRODUCT SPECIFICATIONS

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 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, ICC (Immunocytochemistry), IF (Immunofluorescence), 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.



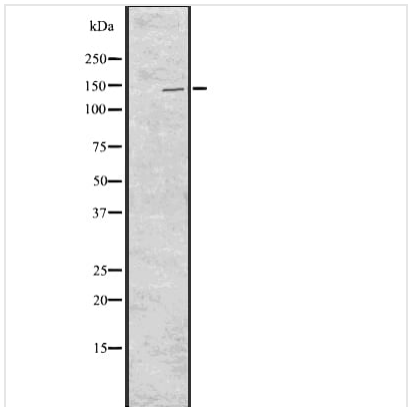
IHC (Immunohistochemisry)

AAA323681 at 1/100 staining Mouse colon 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.



IF (Immunofluorescence)

AAA323681 staining HepG2 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of pan Cadherin using 293 whole cell lysates

ADDITIONAL INFORMATION

Related Product Information for anti-CDH1 antibody	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. 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). 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. 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.
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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 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	CDH1
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.

