

Rabbit E-cadherin Polyclonal Antibody | anti-CDH1 antibody

E-cadherin Antibody

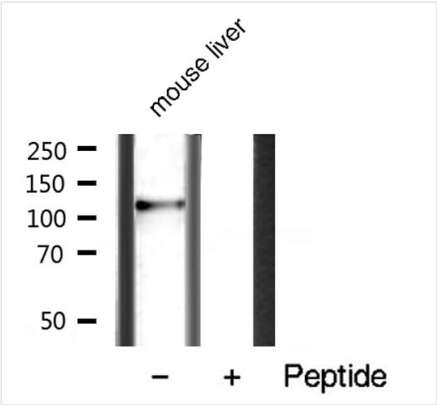
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA30922	Rabbit	Human, Mouse, Rat	Western Blot, Immunohistochemistry, Immunofluorescence, Immunocytochemistry, ELISA

PRODUCT SYNONYMS

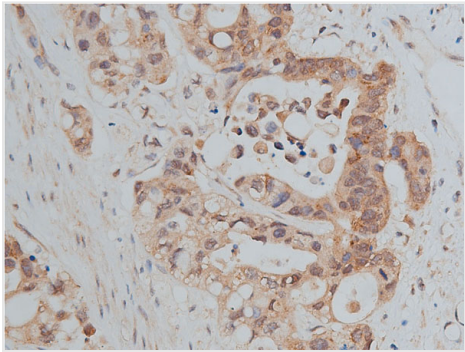
E-cadherin; Polyclonal Antibody; E-cadherin Antibody; Arc 1; CADH1_HUMAN; Cadherin 1; cadherin 1 type 1 E-cadherin; Cadherin1; CAM 120/80; CD 324; CD324; CD324 antigen; cdh1; CDHE; E-Cad/CTF3; ECAD; Epithelial cadherin; epithelial calcium dependant adhesion protein; LCAM; Liver cell adhesion molecule;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

PRODUCT SPECIFICATIONS

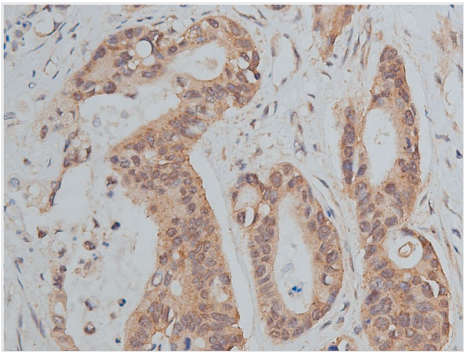
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	E-cadherin antibody detects endogenous levels of total E-cadherin
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered 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	WB (Western Blot), IHC (Immunohistochemistry), IF (Immunofluorescence), ICC (Immunocytochemistry), ELISA
Application Notes	WB: 1:500-1:3000 IHC: 1:50-1:200 IF/ICC: 1:100-1:500
Immunogen	A synthesized peptide derived from human E-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.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Zebrafish (100%), Bovine (100%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (83%), Xenopus (83%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



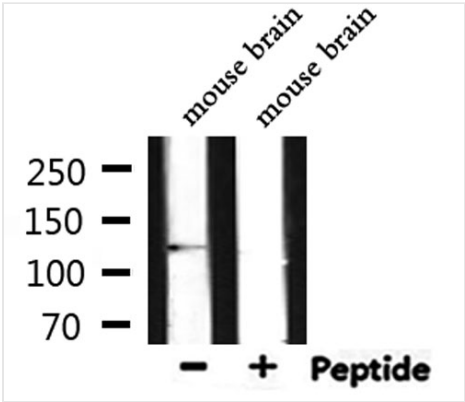
WB (Western Blot)
Western blot analysis on mouse liver tissue lysate using E-cadherin Antibody



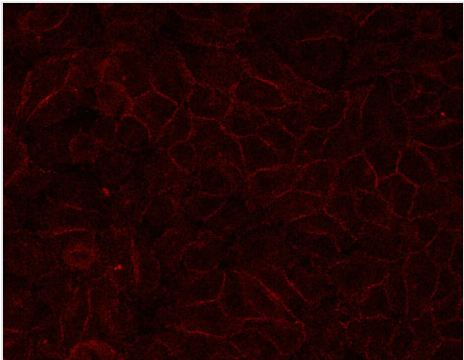
IHC (Immunohistochemistry)
AAA30922 at 1/50 staining human colon cancer tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



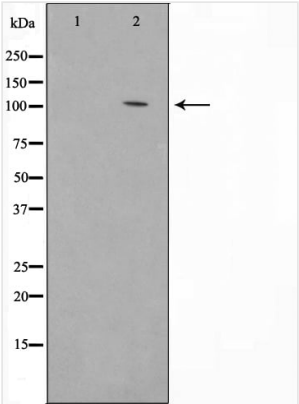
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WB (Western Blot)
Western blot analysis of extracts from mouse brain, using E-cadherin Antibody.



IHC (Immunohistochemistry)
E-cadherin for IHC in human HepG2, Provided by Tianjin University



WB (Western Blot)
Western blot analysis on 293 cell lysate using E-cadherin Antibody, The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-CDH1 antibody	Description: CDH1 a single-pass type I membrane protein, and calcium dependent cell adhesion proteins. It is a ligand for integrin alpha-E/beta-7, and it colocalizes with DLG7 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. Involved in mechanisms regulating cell-cell adhesions, mobility and proliferation of epithelial cells. Defects in CDH1 are involved in dysfunction of the cell-cell adhesion system, triggering cancer invasion (gastric, breast, ovary, endometrium and thyroid) and metastasis. 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 CBL1/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.
References	Bai Y, Wang J, Han J, Xie XL, Ji CG, Yin J, Chen L, Wang CK, Jiang XY, Qi W, Jiang HQ; Journal: Mol Carcinog. BCL2L10 inhibits growth and metastasis of hepatocellular carcinoma both in vitro and in vivo. Wang J, Wang L, Ji Q, Zhu H, Han S; Journal: Biochem Biophys Res Commun. Knockdown of Nucleostemin in an ovarian cancer SKOV-3 cell line and its effects on cell malignancy. Li L, Zhao J, Huang S, Wang Y, Zhu L, Cao Y, Xiong J, Deng J; Journal: Gene. MiR-93-5p promotes gastric cancer-cell progression via inactivation of the Hippo signaling pathway. Shao Q, Zhang P, Ma Y, Lu Z, Meng J, Li H, Wang X, Chen D, Zhang M, Han Y, Liu H, Ma S; Journal: Gene. MicroRNA-139-5p affects cisplatin sensitivity in human nasopharyngeal carcinoma cells by regulating the epithelial-to-mesenchymal transition. Xu PP, Sun YF, Fang Y, Song Q, Yan ZX, Chen Y, Jiang XF, Fei XC, Zhao Y, Leboeuf C, Li B, Wang CF, Janin A, Wang L, Zhao WL; Journal: Sci Rep. JAM-A overexpression is related to disease progression in diffuse large B-cell lymphoma and downregulated by lenalidomide.

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: 120 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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/e-cadherin-antibody-western-blot-immunohistochemistry-immunofluorescence-immunocytochemistry-elisa/30922>