

Human cadherin 1, type 1, E-cadherin (epithelial) ELISA Kit | CDH1 elisa kit

Human E-Cadherin, E-Cad ELISA Kit

CATALOG #
AAA80478

REACTIVITY
Human

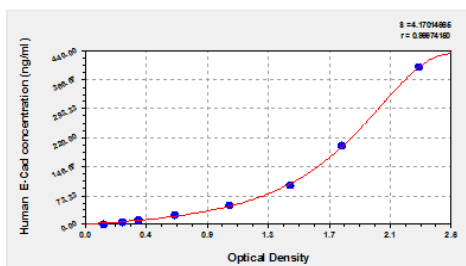
PRODUCT SYNONYMS

cadherin 1; type 1; E-cadherin (epithelial); Human E-Cadherin; E-Cad ELISA Kit; Arc-1; CD324; CDHE; ECAD; LCAM; UVO; E-Cadherin; E-cadherin (epithelial) ; calcium-dependent adhesion protein; epithelial; cell-CAM 120/80; uvomorulin; CDH1 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Human
Specificity	This assay has high sensitivity and excellent specificity for detection of Human CDH1. No significant cross-reactivity or interference between Human CDH1 and analogues was observed.
Sequence Length	882
Samples	Serum, plasma, tissue homogenates
Detection Range	6.25 ng/ml-400 ng/ml
Sensitivity	1.56 ng/ml
Intra-assay Precision	Intra-assay Precision (Precision within an assay): CV% is less than 8% Three samples of known concentration were tested twenty times on one plate to assess. Inter-assay Precision (Precision between assays): CV% is less than 10% Three samples of known concentration were tested in twenty assays to assess.
Detection Wavelength	450 nm
Sample Volume	50-100ul
Protein Biological Process 1	Cell Adhesion
Protein Biological Process 3	Cell adhesion
Preparation and Storage	Unopened test kits should be stored at 2 to 8 degree C upon receipt. Please refer to pdf manual for further storage instructions.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for CDH1 elisa kit	Introduction: Cadherins (Calcium dependent adhesion molecules) are a class of type-1 transmembrane proteins. They play important roles in cell adhesion, ensuring that cells within tissues are bound together. They are dependent on calcium (Ca2+) ions to function, hence their name. Different members of the cadherin family are found in different locations. E-cadherins are found in epithelial tissue; N-cadherins are found in neurons; and P-cadherins are found in the placenta. T-cadherins have no cytoplasmic domains and must be tethered to the plasma membrane. E-cadherin (epithelial) is the most well-studied member of the family. It consists of 5 cadherin repeats (EC1 ~ EC5) in the extracellular domain, one transmembrane domain, and an intracellular domain that binds p120-catenin and beta-catenin. The intracellular domain contains a highly-phosphorylated region vital to beta-catenin binding and therefore to E-cadherin function. Beta-catenin can also bind to alpha-catenin. Alpha-catenin participates in regulation of actin-containing cytoskeletal filaments. In epithelial cells, E-cadherin-containing cell-to-cell junctions are often adjacent to actin-containing filaments of the cytoskeleton. E-cadherin is first expressed in the 2-cell stage of mammalian development, and becomes phosphorylated by the 8-cell stage, where it causes compaction. In adult tissues, E-cadherin is expressed in epithelial tissues, where it is constantly regenerated with a 5-hour half-life on the cell surface. Loss of E-cadherin function or expression has been implicated in cancer progression and metastasis. E-cadherin downregulation decreases the strength of cellular adhesion within a tissue, resulting in an increase in cellular motility. This in turn may allow cancer cells to cross the basement membrane and invade surrounding tissues. E-cadherin is also used by pathologists to identify different kinds of breast cancer. When compared with invasive duct carcinoma, E-cadherin expression is markedly reduced or absent in the great majority of invasive lobular carcinomas when studied by immunohistochemistry. Principle of the Assay: The microtiter plate provided in this kit has been pre-coated with an antibody specific to E-Cad. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific for E-Cad and Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. Then a TMB (3,3',5,5' tetramethyl-benzidine) substrate solution is added to each well. Only those wells that contain E-Cad, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of a sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450 nm +/- 2 nm. The concentration of E-Cad in the samples is then determined by comparing the O.D. of the samples to the standard curve.
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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; Q9UII8; 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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com

Online datasheet: <https://stage.aaabiotech.com/cdh1-human-elisa-kits/cadherin-1-type-1-e-cadherin-epithelial/80478>