Datasheet for ABIN1112587

E-cadherin ELISA Kit

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Overview

Quantity:	96 tests
Target:	E-cadherin (CDH1)
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	156-10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

Product Details

Purpose:	For quantitative detection of E-Cadherin in human serum, plasma, body fluids, tissue lysates or cell culture supernatants.
Sample Type:	Cell Culture Supernatant, Plasma, Serum, Tissue Lysate
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Sensitivity:	< 15 pg/mL
Components:	1. One 96-well plate pre-coated with anti-human E-Cadherin antibody 2. Lyophilized human E-Cadherin standards: 2 tubes (10ng / tube) 3. Sample / Standard diluent buffer: 30ml 4. Biotin conjugated anti-human E-Cadherin antibody (Concentrated): 130 µl.
Material not included:	1. 37 °C incubator 2. Microplate reader (wavelength: 450nm) 3. Precise pipette and disposable pipette tips 4. Automated plate washer 5. ELISA shaker 6. 1.5ml of Eppendorf tubes 7. Plate cover 8. Absorbent filter papers 9. Plastic or glass container with volume of above 1L

Target Details

Target:	E-cadherin (CDH1)
Alternative Name:	E-Cadherin (CDH1 Products)
Background:	Cadherin-1 also known as CAM 120/80 or epithelial cadherin (E-cadherin) or uvomorulin is a protein that in humans is encoded by the CDH1 gene. E-cadherin is a Ca2+–dependent epithelial cell-cell adhesion molecule. Downregulation of E-cadherin expression often correlates with strong invasive potential and poor prognosis of human carcinomas. It has 16 exons spanning approximately 100 kb of genomic DNA. The gene structure is similar to that of other cadherins. E-cadherin plays a central part in the process of epithelial morphogenesis. Expression of this protein is downregulated during the acquisition of metastatic potential at late stages of epithelial tumour progression.
Pathways:	WNT Signaling, Sensory Perception of Sound, Cell-Cell Junction Organization, Tube Formation

Application Details

Comment:	This kit was based on sandwich enzyme-linked immune-sorbent assay technology. Anti-E-Cadherin polyclonal antibody was pre-coated onto 96-well plates. And the biotin conjugated anti-E-Cadherin polyclonal antibody was used as detection antibodies. The standards test samples and biotin conjugated detection antibody were added - the wells subsequently and wash with wash buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with wash buffer. TMB substrates were used - visualize HRP enzymatic reaction. TMB was catalyzed by HRP - produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional - the E-Cadherin amount of sample captured in plate. Read the O.D. absorbance at 450 nm in a microplate reader and then the concentration of E-Cadherin can be calculated.
Plate:	Pre-coated
Reagent Preparation:	1. Before the experiment, centrifuge each kit component for several minutes to bring down all reagents to the bottom of tubes. 2. It is recommend to measure each standard and sample in duplicate. 3. Do NOT let the plate completely dry at any time! Since the dry condition can inactivate the biological material on the plate. 4. Do not reuse pipette tips and tubes to avoid cross contamination. 5. Do not use the expired components and the components from different batches. 6. To avoid the marginal effect of plate incubation for temperature differences (the marginal wells always get stronger reaction), it is recommend to equilibrate the ABC working solution and TMB substrate for at least 30 min at room temperature (37°C) before adding to wells.The TMB substrate (Kit Component 8) is colorless and transparent before use, if not,

Application Details

	please contact us for replacement.
Sample Preparation:	Preparation of sample and reagents 1. Sample Isolate the test samples soon after collecting, then, analyze immediately (within 2 hours). Or aliquot and store at -20 °C for long term. Avoid multiple freeze-thaw cycles. Tissue lysate, body fluids and cell culture supernatants: Centrifuge to remove precipitate, analyze immediately or aliquot and store at -20 °C . Serum: Coagulate the serum at room temperature (about 4 hours). Centrifuge at approximately 1000 × g for 15 min. Analyze the serum immediately or aliquot and store at -20 °C . Plasma: Collect plasma with citrate, heparin or EDTA as the anticoagulant. Centrifuge for 15 min at 1000 x g within 30 min of collection. Analyze immediately or aliquot and store frozen at -20 °C. Note: 1. Coagulate blood samples completely, then, centrifuge, and avoid hemolysis and particle. 2. NaN3 can not be used as test sample preservative, since it is the inhibitor for HRP.
Restrictions:	For Research Use only

Handling

Preservative:	Sodium azide, Thimerosal (Merthiolate)