

Datasheet for ABIN921078

**E-cadherin ELISA Kit**[Go to Product page](#)**1** Image

## Overview

Quantity:	96 tests
Target:	E-cadherin (CDH1)
Binding Specificity:	AA 157-709
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	156-10000 pg/mL
Minimum Detection Limit:	156 pg/mL
Application:	ELISA

## Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse E-Cadherin
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: D157-V709
Specificity:	Expression system for standard: NSO Immunogen sequence: D157-V709
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

## Product Details

Sensitivity: <15pg/mL

Material not included: Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

## Target Details

Target: E-cadherin (CDH1)

Alternative Name: CDH1 ([CDH1 Products](#))

Background: Protein Function: 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 (By similarity). .

Background: E-Cadherin, also called Cadherin 1 (CDH1), Uvomorulin or calcium-dependent adhesion protein, epithelial. E-cadherin is a Ca(2+)-dependent epithelial cell-cell adhesion molecule. Downregulation of E-cadherin expression often correlates with strong invasive potential and poor prognosis of human carcinomas. The gene spans a region of approximately 100 kb, and its location on chromosome 16q22.1. It contains 16 exons and a 65-kb-long intron 2. E-cadherin gene mutations may contribute to the development of diffusely growing gastric carcinomas. E-cadherin plays a central part in the process of epithelial morphogenesis and acts as a strong invasion suppressor in experimental tumor cell systems.

Synonyms: Cadherin-1,ARC-1,Epithelial cadherin,E-cadherin,Uvomorulin,CD324,E-Cad/CTF1,E-Cad/CTF2,E-Cad/CTF3,Cdh1,

Full Gene Name: Cadherin-1

Cellular Localisation: Cell junction. Cell membrane, Single-pass type I membrane protein. 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 (By similarity)..

Gene ID: 12550

## Target Details

UniProt: [P09803](#)

Pathways: [WNT Signaling](#), [Sensory Perception of Sound](#), [Cell-Cell Junction Organization](#), [Tube Formation](#)

## Application Details

Application Notes: Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.

Comment: Tissue Specificity: Non-neural epithelial tissues.

Plate: Pre-coated

Protocol: mouse E-Cadherin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for E-Cadherin has been precoated onto 96-well plates. Standards(NSO, D157-V709) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for E-Cadherin is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse E-Cadherin amount of sample captured in plate.

Assay Procedure: Aliquot 0.1 mL per well of the 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 313pg/mL, 156pg/mL mouse E-Cadherin standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(heparin) to each empty well. See "Sample Dilution Guideline" above for details. We recommend that each mouse E-Cadherin standard solution and each sample is measured in duplicate.

Assay Precision:

- Sample 1: n=16, Mean(ng/ml): 1.09, Standard deviation: 0.062, CV(%): 5.7
- Sample 2: n=16, Mean(ng/ml): 3.31, Standard deviation: 0.209, CV(%): 6.3
- Sample 3: n=16, Mean(ng/ml): 6.76, Standard deviation: 0.487, CV(%): 7.2,
- Sample 1: n=24, Mean(ng/ml): 1.14, Standard deviation: 0.072, CV(%): 6.3
- Sample 2: n=24, Mean(ng/ml): 3.59, Standard deviation: 0.255, CV(%): 7.1
- Sample 3: n=24, Mean(ng/ml): 7.23, Standard deviation: 0.528, CV(%): 7.3

Restrictions: For Research Use only

## Handling

Handling Advice: Avoid multiple freeze-thaw cycles.

Handling

Storage:	-20 °C,4 °C
Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
Expiry Date:	12 months

Images

