

## ARG81681 Mouse E Cadherin ELISA Kit

Package: 96 wells Store at: 4°C

## Component

Cat. No.	Component Name	Package	Temp
ARG81681-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81681-002	Standard	2 X 10 ng/vial	4°C
ARG81681-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81681-004	Antibody conjugate concentrate (100X)	1 vial (100 μl)	4°C
ARG81681-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81681-006	HRP-Streptavidin concentrate (100X)	1 vial (100 μl)	4°C
ARG81681-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81681-008	25X Wash buffer	20 ml	4°C
ARG81681-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81681-010	STOP solution	10 ml (Ready to use)	4°C
ARG81681-011	Plate sealer	4 strips	Room temperature

### Summary

Product Description	ARG81681 Mouse E Cadherin ELISA Kit is an Enzyme Immunoassay kit for the quantification of Mouse E Cadherin in serum, plasma (heparin) and cell culture supernatants.
Tested Reactivity	Ms
Tested Application	ELISA
Specificity	There is no detectable cross-reactivity with other relevant proteins.
Target Name	E Cadherin
Conjugation	HRP
Conjugation Note	Substrate: TMB and read at 450 nm.
Sensitivity	78 pg/ml
Sample Type	Serum, plasma (heparin) and cell culture supernatants.
Standard Range	156 - 10000 pg/ml
Sample Volume	100 μΙ

Precision	Intra-Assay CV: 6.5%; Inter-Assay CV: 7.4%
Alternate Names	Uvomorulin; Arc-1; Cadherin-1; E-cadherin; CDHE; CD antigen CD324; ECAD; CAM 120/80; LCAM; Epithelial cadherin; UVO; CD324

# Application Instructions

# Properties

Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory research only, not for drug, diagnostic or other use.

### **Bioinformation**

Gene Symbol	CDH1
Gene Full Name	cadherin 1, type 1
Background	E Cadherin is a classical cadherin of the cadherin superfamily. Alternative splicing results in multiple transcript variants, at least one of which encodes a preproprotein that is proteolytically processed to generate the mature glycoprotein. This calcium-dependent cell-cell adhesion protein is comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Mutations in this gene are correlated with gastric, breast, colorectal, thyroid and ovarian cancer. Loss of function of this gene is thought to contribute to cancer progression by increasing proliferation, invasion, and/or metastasis. The ectodomain of this protein mediates bacterial adhesion to mammalian cells and the cytoplasmic domain is required for internalization. This gene is present in a gene cluster with other members of the cadherin family on chromosome 16. [provided by RefSeq, Nov 2015]
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.
	effect on APP C99 and C83 production.
	(Microbial infection) Serves as a receptor for Listeria monocytogenes; internalin A (InIA) binds to this protein and promotes uptake of the bacteria. [UniProt]
Highlight	Related products: <u>Cadherin antibodies; Cadherin ELISA Kits; Cadherin Duos / Panels;</u> New ELISA data calculation tool: <u>Simplify the ELISA analysis by GainData</u>
РТМ	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. [UniProt]

