

ARG81924 Rat E Cadherin ELISA Kit

Package: 96 wells
Store at: 4°C

Component

Cat. No.	Component Name	Package	Temp
ARG81924-001	Antibody-coated microplate	8 X 12 strips	4°C. Unused strips should be sealed tightly in the air-tight pouch.
ARG81924-002	Standard	2 X 10 ng/vial	4°C
ARG81924-003	Standard/Sample diluent	30 ml (Ready to use)	4°C
ARG81924-004	Antibody conjugate concentrate (100X)	1 vial (100 µl)	4°C
ARG81924-005	Antibody diluent buffer	12 ml (Ready to use)	4°C
ARG81924-006	HRP-Streptavidin concentrate (100X)	1 vial (100 µl)	4°C
ARG81924-007	HRP-Streptavidin diluent buffer	12 ml (Ready to use)	4°C
ARG81924-008	25X Wash buffer	20 ml	4°C
ARG81924-009	TMB substrate	10 ml (Ready to use)	4°C (Protect from light)
ARG81924-010	STOP solution	10 ml (Ready to use)	4°C
ARG81924-011	Plate sealer	4 strips	Room temperature

Summary

Product Description	ARG81924 Rat E Cadherin ELISA Kit is an Enzyme Immunoassay kit for the quantification of Rat E Cadherin in serum, plasma (heparin) and cell culture supernatants.
Tested Reactivity	Rat
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 µl

Precision	Intra-Assay CV: 7.2%; Inter-Assay CV: 8.6%
Alternate Names	Uvomorulin; Arc-1; Cadherin-1; E-cadherin; CDHE; CD antigen CD324; ECAD; CAM 120/80; LCAM; Epithelial cadherin; UVO; CD324

Application Instructions

Assay Time	~ 5 hours
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Properties

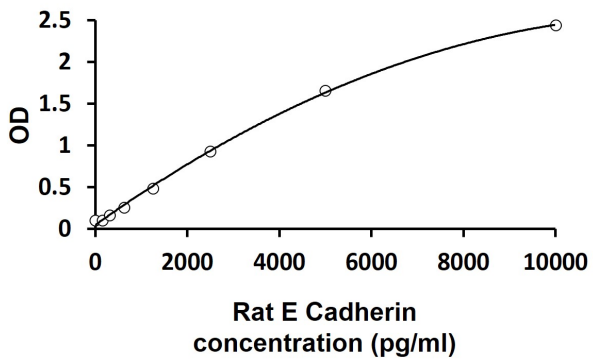
Form	96 well
Storage instruction	Store the kit at 2-8°C. Keep microplate wells sealed in a dry bag with desiccants. Do not expose test reagents to heat, sun or strong light during storage and usage. Please refer to the product user manual for detail temperatures of the components.
Note	For laboratory 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	<p>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.</p> <p>E-Cad/CTF2 promotes non-amyloidogenic degradation of Abeta precursors. Has a strong inhibitory effect on APP C99 and C83 production.</p> <p>(Microbial infection) Serves as a receptor for <i>Listeria monocytogenes</i>; internalin A (InIA) binds to this protein and promotes uptake of the bacteria. [UniProt]</p>
Highlight	<p>Related products: Cadherin antibodies; Cadherin ELISA Kits; Cadherin Duos / Panels; New ELISA data calculation tool: Simplify the ELISA analysis by GainData</p>
PTM	<p>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.</p> <p>N-glycosylation at Asn-637 is essential for expression, folding and trafficking.</p>

Ubiquitinated by a SCF complex containing SKP2, which requires prior phosphorylation by CK1/CSNK1A1. Ubiquitinated by CBL1/HAKAI, requires prior phosphorylation at Tyr-754. [UniProt]

Images



ARG81924 Rat E Cadherin ELISA Kit standard curve image

ARG81924 Rat E Cadherin ELISA Kit results of a typical standard run with optical density reading at 450 nm.