ARG65402
anti-E Cadherin antibody [67A4]

Package: 50 µg
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [67A4] recognizes E Cadherin
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, IHC-Fr, IP, WB
Specificity	The mouse monoclonal antibody 67A4 recognizes CD324 / Ecadherin, an approximately 100 kDa epithelial cell adhesion molecule, whose detection is important for determination of invasive potential of epithelial neoplasms. HLDA VIII
Host	Mouse
Clonality	Monoclonal
Clone	67A4
Isotype	IgG1
Target Name	E Cadherin
Immunogen	T-47D cells_x000D_
Conjugation	Un-conjugated
Alternate Names	Uvomorulin; Arc-1; Cadherin-1; E-cadherin; CDHE; CD antigen CD324; ECAD; CAM 120/80; LCAM; Epithelial cadherin; UVO; CD324

Application Instructions

Application table

Application	Dilution
FACS	5 - 10 µg/ml
ICC/IF	Assay-dependent
IHC-Fr	4 - 8 µg/ml
IP	Assay-dependent
WB	1 - 4 µg/ml

Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
Positive Control	FACS: CACO-2 and HT-29 IHC-Fr: Tonsil

Properties

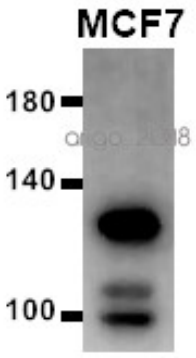
Form	Liquid
Purification	Purified from cell culture supernatant by protein-A affinity chromatography.
Purity	> 95% (by SDS-PAGE)

Buffer	PBS (pH 7.4) and 15 mM Sodium azide
Preservative	15 mM Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

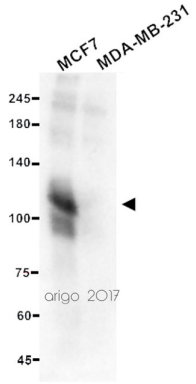
Database links	GeneID: 999 Human Swiss-port # P12830 Human
Gene Symbol	CDH1
Gene Full Name	cadherin 1, type 1, E-cadherin (epithelial)
Background	E Cadherin is a classical cadherin of the cadherin superfamily. Alternative splicing results in multiple transcript variants, at least one of which encodes 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. E-Cad/CTF2 promotes non-amyloidogenic degradation of Abeta precursors. Has a strong inhibitory effect on APP C99 and C83 production. (Microbial infection) Serves as a receptor for Listeria monocytogenes; internalin A (InlA) binds to this protein and promotes uptake of the bacteria. [UniProt]
Research Area	EMT Study antibody; Epithelial Marker antibody
Calculated Mw	97 kDa
PTM	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.

Images



ARG65402 anti-E Cadherin antibody [67A4] WB image

Western blot: 20 µg of MCF7 cell lysate stained with ARG65402 anti-E Cadherin antibody [67A4] at 1:1000 dilution.



ARG65402 anti-E Cadherin antibody [67A4] WB image

Western blot: 20 µg of MCF7 and MDA-MB-231 cell lysates stained with ARG65402 anti-E Cadherin antibody [67A4] at 1:500 dilution.

MDA-MB-231 was a negative control.