Datasheet for ABIN1387847

anti-E-cadherin antibody (AA 401-500)

1 Validation | 12 Images | 14 Publications

Go to Product page

Overview

Quantity:	100 µL
Target:	E-cadherin (CDH1)
Binding Specificity:	AA 401-500
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This E-cadherin antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS), ELISA, Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Immunocytochemistry (ICC), Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), Immunofluorescence (Cultured Cells) (IF (cc))

Product Details

Immunogen:	KLH conjugated synthetic peptide derived from human E-cadherin
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Predicted Reactivity:	Cow,Pig,Horse,Rabbit
Purification:	Purified by Protein A.

Target Details

Target:	E-cadherin (CDH1)

Target Details

Alternative Name:	E cadherin (CDH1 Products)
Background:	Synonyms: UVO, CDHE, ECAD, LCAM, Arc-1, CD324, Cadherin-1, CAM 12/8, Epithelial cadherin, E-cadherin, Uvomorulin, CDH1 Background: 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. E-Cad/CTF2 promotes non-amyloidogenic degradation of Abeta precursors. Has a strong inhibitory effect on APP C99 and C83 production.
Gene ID:	999
UniProt:	P12830
Pathways:	WNT Signaling, Sensory Perception of Sound, Cell-Cell Junction Organization, Tube Formation

Application Details

Application Notes:	WB 1:300-5000
	ELISA 1:500-1000
	FCM 1:20-100
	IHC-P 1:200-400
	IHC-F 1:100-500
	IF(IHC-P) 1:50-200
	IF(IHC-F) 1:50-200
	IF(ICC) 1:50-200
	ICC 1:100-500

Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	ProClin
Precaution of Use:	This product contains ProClin: a POISONOUS AND HAZARDOUS SUBSTANCE, which should be

Handling

	handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.
Expiry Date:	12 months

Publications

Product cited in:

Guo, Gao, Sui, Jiao, Sun, Fu, Jin: "miR-375-3p/YWHAZ/β-catenin axis regulates migration, invasion, EMT in gastric cancer cells." in: **Clinical and experimental pharmacology & physiology**, Vol. 46, Issue 2, pp. 144-152, (2019) (PubMed).

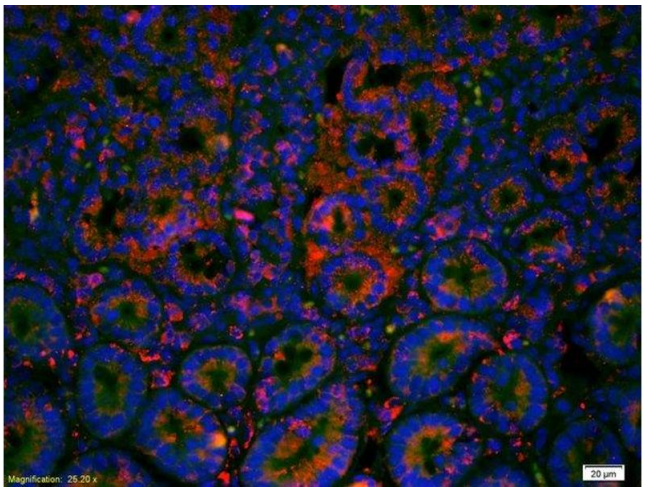
Yun, Gao, Yue, Guo, Li, Sang: "Sulfate Aerosols Promote Lung Cancer Metastasis by Epigenetically Regulating the Epithelial-to-Mesenchymal Transition (EMT)." in: **Environmental science & technology**, Vol. 51, Issue 19, pp. 11401-11411, (2018) (PubMed).

Fang, Liu, Wu, Liu, Pan, Li: "Upregulation of long noncoding RNA CCAT1-L promotes epithelial-mesenchymal transition in gastric adenocarcinoma." in: **OncoTargets and therapy**, Vol. 11, pp. 5647-5655, (2018) (PubMed).

Lin, Zhang, Dai, Zhang, Zhang, Xue, Wu: "TFF3 Contributes to Epithelial-Mesenchymal Transition (EMT) in Papillary Thyroid Carcinoma Cells via the MAPK/ERK Signaling Pathway." in: **Journal of Cancer**, Vol. 9, Issue 23, pp. 4430-4439, (2018) (PubMed).

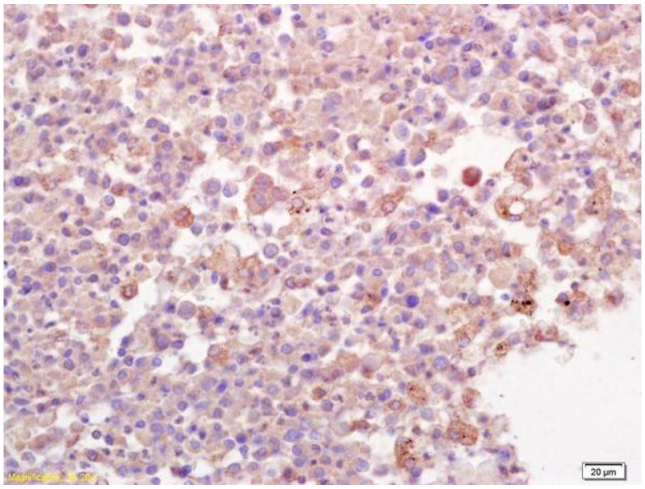
Wang, Nikhil, Viccaro, Chang, White, Shah: "Phosphorylation-dependent regulation of ALDH1A1 by Aurora kinase A: insights on their synergistic relationship in pancreatic cancer." in: **BMC biology**, Vol. 15, Issue 1, pp. 10, (2017) (PubMed).

There are more publications referencing this product on: Product page



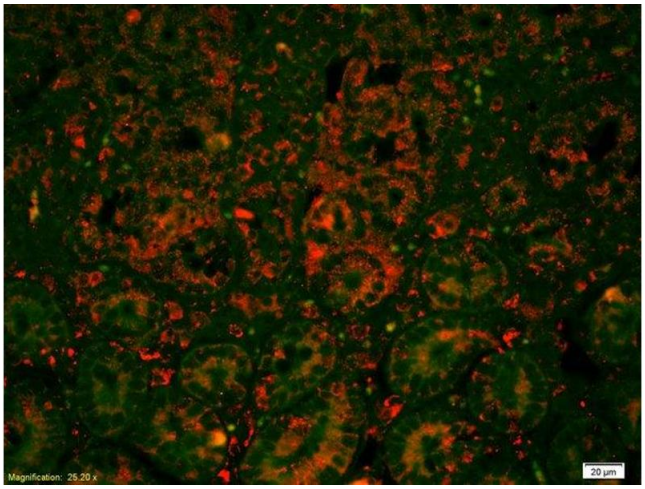
Immunofluorescence

Image 1. Formalin-fixed and paraffin-embedded mouse intestine labeled with Anti-E cadherin/CD324 Polyclonal Antibody, Unconjugated (ABIN1387847) 1:200, overnight at 4°C, The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated used at 1:200 dilution for 40 minutes at 37°C.DAPI was used to stain the cell nuclei



Immunohistochemistry

Image 2. Formalin-fixed and paraffin embedded human lung carcinoma labeled with Rabbit Anti E cadherin/CD324 Polyclonal Antibody, Unconjugated (ABIN1387847) at 1:200 followed by conjugation to the secondary antibody and DAB staining



Immunofluorescence

Image 3. Formalin-fixed and paraffin-embedded mouse intestine labeled with Anti-E cadherin/CD324 Polyclonal Antibody, Unconjugated (ABIN1387847) 1:200, overnight at 4°C, The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated used at 1:200 dilution for 40 minutes at 37°C.

Please check the product details page for more images. Overall 12 images are available for ABIN1387847.

Validation report #029768 for Flow Cytometry (FACS)

Successfully validated (Flow Cytometry (FACS))

by Flow Cytometry & Cell Separation Facility, Purdue University

Report Number: 029768

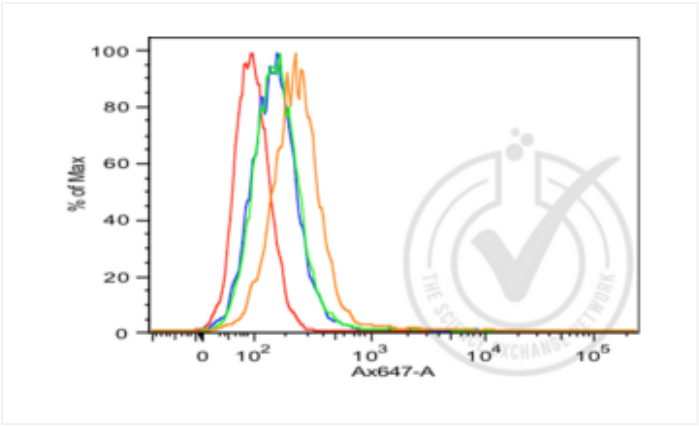
Date: Jul 22 2014

Lot Number:	130902
Method validated:	Flow Cytometry (FACS)
Positive Control:	MCF-7 cells
Negative Control:	SH-SY5Y cells
Notes:	A weak but specific signal is observed in the positive control MCF7 cells stained with anti-E-Cadherin plus secondary antibody compared with isotype, secondary only and unstained cells. No staining was observed in the negative control SH-SY5Y cells as expected.
Primary Antibody:	- Antigen: Cadherin 1, Type 1, E-Cadherin (Epithelial) (CDH1) - Catalog number: ABIN1387847 - Supplier: Bioss - Supplier catalog number: bs-10009R - Lot number: 130902 - Dilution: 1 µg in 100 µL 1X PBS containing 0.5% BSA
Secondary Antibody:	- Antibody: Goat anti-rabbit IgG-Alexa 647 - Supplier: Jackson Immunoresearch - Catalog number: 712-606-150 - Dilution: 1:500 in 1X PBS containing 0.5% BSA
Isotype:	- Antibody: Rabbit IgG - Catalog number: 3900S - Supplier: Cell Signaling Technology - Dilution: 1 µg in 100 µL 1X PBS containing 0.5% BSA
Controls:	• Positive control: MCF-7 cells • Negative control: SH-SY5Y cells • Isotype control: Both cell lines treated with rabbit IgG instead of the primary antibody to confirm that primary antibody binding is specific. • Secondary only control: Both cell lines treated with Goat anti-rabbit IgG-Alexa 647 to confirm no background signal produced from secondary antibody alone
Protocol:	• Positive and negative control cells were cultured in DMEM + 10% FBS. - Positive and negative control cells were washed once with phosphate-buffered saline (PBS) and harvested with a non-enzymatic cell dissociation solution (Cellstripper, Mediatech, Inc). • Detached cells were washed twice and resuspended in 100 µL 1X PBS containing 0.5% BSA: - unstained cells - secondary antibody alone - isotype control antibody + secondary antibody - primary antibody + secondary antibody • Cells were incubated for 30 min on ice. • Labeled cells were washed twice in PBS containing 0.5% BSA.

- Cells were resuspended with 1X PBS containing 0.5% BSA + 10% goat serum and incubated for 15 min at room temperature.
- Goat anti-rabbit IgG-Alexa 647 secondary antibody (Jackson Immunoresearch) was added at a 1:500 dilution. The cells were incubated for 30 min in the dark on ice.
- Labeled cells were washed twice in PBS containing 0.5% BSA.
- Propidium Iodide (PI) was added to discern live cells from dead cells.
- Cells were analyzed on a FACSAria III (BD Biosciences) using a red laser (640 nm excitation / 660 nm emission).

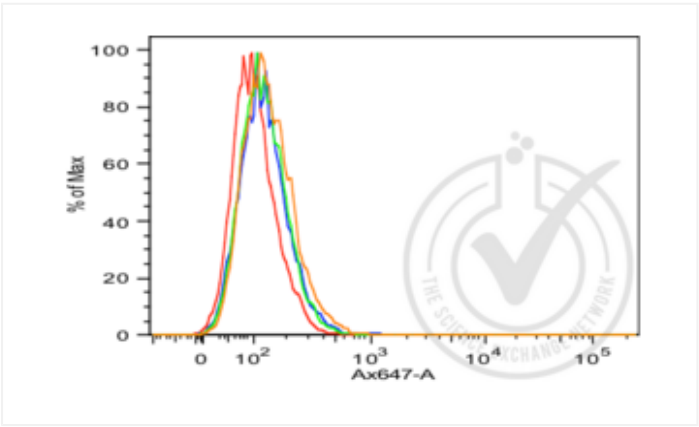
Experimental Notes:	- The data displayed is gated on PI negative cells.

Images for Validation report #029768



Validation image no. 1 for anti-Cadherin 1, Type 1, E-Cadherin (Epithelial) (CDH1) (AA 401-500) antibody (ABIN1387847)

Figure 1: Positive control MCF7 cells. The red histogram is unstained cells, the blue histogram is cells stained with secondary antibody alone, the green histogram is cells stained with rabbit IgG isotype control antibody plus secondary antibody and the orange histogram is cells stained with anti-E-Cadherin plus secondary antibody. The secondary antibody is a goat anti-rabbit IgG-Alexa 647 (Jackson Immunoresearch).



Validation image no. 2 for anti-Cadherin 1, Type 1, E-Cadherin (Epithelial) (CDH1) (AA 401-500) antibody (ABIN1387847)

Figure 2: Negative control SH-SY5Y cells. The red histogram is unstained cells, the blue histogram is cells stained with secondary antibody alone, the green histogram is cells stained with rabbit IgG isotype control antibody plus secondary antibody and the orange histogram is cells stained with anti-E-Cadherin plus secondary antibody. The secondary antibody is a goat anti-rabbit IgG-Alexa 647 (Jackson Immunoresearch).