# abcam

# Product datasheet

# Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker ab40772





重组 RabMAb

★★★★ 22 Abreviews 634 References 28 图像

#### 概述

产品名称 Anti-E Cadherin抗体[EP700Y] - Intercellular Junction Marker

描述 兔单克隆抗体[EP700Y] to E Cadherin - Intercellular Junction Marker

宿主 Rabbit

特异性 E-cadherin contains a number of cleavage sites which may yield a complex fragmentation pattern

> in WB. Multiple bands between ~80-120 kDa may be observed. This antibody has been tested on human samples in both WB and IHC. Customer feedback (see Abreview) suggests the antibody

does not perform well in IHC on mouse tissue.

经测试应用 适用于: Flow Cyt (Intra), ICC/IF, mIHC, IHC-P, WB

种属反应性 与反应: Human

免疫原 Synthetic peptide within Human E Cadherin aa 600-700. The exact sequence is proprietary.

Database link: P12830

阳性对照 IHC-P: Human breast carcinoma, lung adenocarcinoma and colonic adenocarcinoma tissue.

> Human papillary carcinoma of thyroid gland and transitional cell carcinoma of kidney tissue. ICC/IF: MCF7, HT-29 and wild-type A431 cells. Flow Cyt (intra): A431 and MCF7 cells. WB:

MCF-7, HT-29, HepG2 and PC-3 whole cell lysate. mlHC: Human endometrium tissue.

常规说明 Abcam recommended secondaries - Goat Anti-Rabbit HRP (ab205718) and Goat Anti-Rabbit

Alexa Fluor® 488 (ab150077). Or search our wide range of secondary antibodies for use with

your experiment.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

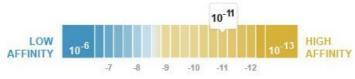
Rat: We have preliminary internal testing data to indicate this antibody may not react with this species. Please contact us for more information.

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

解离常数( $K_D$ )  $K_D = 2.80 \times 10^{-11} M$ 



Learn more about K<sub>D</sub>

**存储溶液** pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 EP700Y

同种型 IgG

#### 应用

# The Abpromise guarantee Abpromise™承诺保证使用ab40772于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/30.  ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody. For purified format use at1/1000.
ICC/IF	<b>★★★★</b> (9)	Use a concentration of 0.2 - 1 µg/ml.  Permeabilisation is unnecessary as the immunogen is in an extracellular domain.
mIHC		Use at an assay dependent concentration.
IHC-P	<b>★★★★</b> (4)	1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See IHC antigen retrieval protocols.
WB	★ ★ ★ ☆ ☆ (5)	1/1000 - 1/50000. Detects a band of approximately 80-120 kDa (predicted molecular weight: 97 kDa). For unpurified protein: 1/200000 dilution

#### 靶标

#### 功能

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.

#### 组织特异性

# 疾病相关

Non-neural epithelial tissues.

Defects in CDH1 are the cause of hereditary diffuse gastric cancer (HDGC) [MIM:137215]. An autosomal dominant cancer predisposition syndrome with increased susceptibility to diffuse gastric cancer. Diffuse gastric cancer is a malignant disease characterized by poorly differentiated infiltrating lesions resulting in thickening of the stomach. Malignant tumors start in the stomach, can spread to the esophagus or the small intestine, and can extend through the stomach wall to nearby lymph nodes and organs. It also can metastasize to other parts of the body. Note=Heterozygous germline mutations CDH1 are responsible for familial cases of diffuse gastric cancer. Somatic mutations in the has also been found in patients with sporadic diffuse gastric cancer and lobular breast cancer.

Defects in CDH1 are a cause of susceptibility to endometrial cancer (ENDMC) [MIM:608089]. Defects in CDH1 are a cause of susceptibility to ovarian cancer (OC) [MIM:167000]. Ovarian cancer common malignancy originating from ovarian tissue. Although many histologic types of ovarian neoplasms have been described, epithelial ovarian carcinoma is the most common form. Ovarian cancers are often asymptomatic and the recognized signs and symptoms, even of late-stage disease, are vague. Consequently, most patients are diagnosed with advanced disease.

#### 序列相似性

# 翻译后修饰

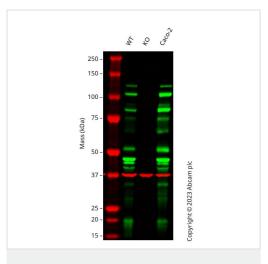
# 细胞定位

Contains 5 cadherin domains.

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.

Cell junction. Cell membrane. 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.

#### 图片



Western blot - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

**All lanes :** Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772) at 1/1000 dilution

Lane 1: Wild-type A431 cell lysate

Lane 2: CDH1 knockout A431 cell lysate

Lane 3: Caco-2 cell lysate

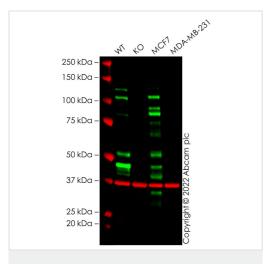
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 97 kDa

Observed band size: 110,130,40,55,80 kDa

Western blot: Anti-CDH1 antibody [EP700Y] (ab40772) staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab40772 was shown to bind specifically to CDH1. A band was observed at 130, 110, 80, 55, 40 kDa in wild-type A431 cell lysates with no signal observed at this size in CDH1 knockout cell line ab273747 (knockout cell lysate ab273781). To generate this image, wild-type and CDH1 knockout A431 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

**All lanes :** Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772) at 1/10000 dilution

Lane 1: Wild-type Raji cell lysate

Lane 2 : CDH1 knockout Raji cell lysate

Lane 3: MCF7 cell lysate

Lane 4: MDA-MB-231 cell lysate

Lysates/proteins at 20 µg per lane.

# **Secondary**

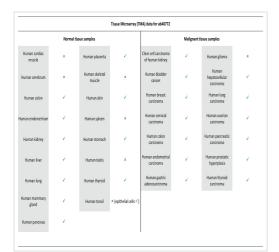
**All lanes :** Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 97 kDa

Observed band size: 105,130 kDa

False colour image of Western blot: Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker staining at 1/10000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab40772 was shown to bind specifically to E Cadherin. A band was observed at 105/130 kDa in wild-type Raji cell lysates with no signal observed at this size in CDH1 knockout cell line ab273747 (knockout cell lysate ab273781). To generate this image, wild-type and CDH1 knockout Raji cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.

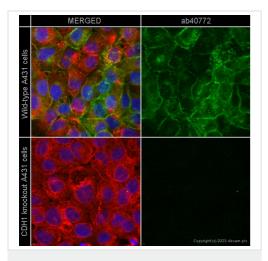


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-E Cadherin antibody

[EP700Y] - Intercellular Junction Marker (ab40772)

Tissue Microarrays stained for Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker using ab40772 in immunohistochemical analysis. This table provides a detailed overview of positive (tick mark) and negaive (cross mark) staining per sample type tested. The section was incubated with ab40772 for 30 mins at room temperature followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (ab209101). The immunostaining was performed on a Leica Biosystems BOND® RX instrument.

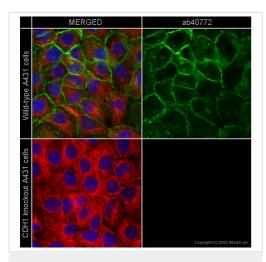
Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



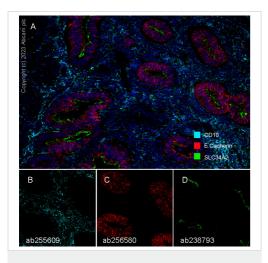
Immunocytochemistry/ Immunofluorescence - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

Immunofluorescence staining of E-Cadherin using ab40772 in wild-type A431 cells (top panel) and CDH1 knockout A431 cells (bottom panel). The cells were fixed with 4% formaldehyde (10 min), permeabilized with 0.1% Triton-X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab40772 at 1 µg/mL and ab7291 at 1 µg/mL overnight at +4°C, followed by a further incubation at room temperature for 1h with Goat Anti-Rabbit lgG H&L (Alexa Fluor<sup>®</sup> 488) preadsorbed (ab150081) (shown in green) and Goat Anti-Mouse lgG H&L (Alexa Fluor<sup>®</sup> 594) preadsorbed (ab150120) (shown in red), both at 1/1000. Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a confocal section is shown.



Immunocytochemistry/ Immunofluorescence - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)



Multiplex immunohistochemistry - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

Immunofluorescence staining of E-Cadherin using ab40772 in wild-type A431 cells (top panel) and CDH1 knockout A431 cells (bottom panel). The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% Triton-X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab40772 at 0.2 µg/mL and ab7291 at 1 µg/mL overnight at +4°C, followed by a further incubation at room temperature for 1h with Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) preadsorbed (ab150081) (shown in green) and Goat Anti-Mouse lgG H&L (Alexa Fluor® 594) preadsorbed (ab150120) (shown in red), both at 1/1000. Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a confocal section is shown.

Fluorescence multiplex immunohistochemical analysis of the human endometrium (Formalin/PFA-fixed paraffin-embedded sections).

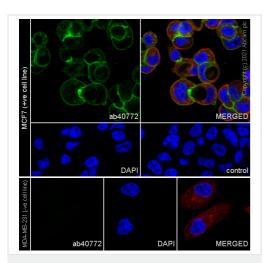
Panel A: merged staining of anti-E Cadherin (ab256580, red; Opal™690), anti-SLC34A2 (ab238793, green; Opal™520) and anti-CD10 (ab255609, cyan; Opal™570) on human endometrium. Panel B: anti-CD10 stained on stromal cells. Panel C: anti-E Cadherin stained on glandular cells. Panel D: anti-SLC34A2 stained on apical membrane of glandular cells. Opal Polymer HRP Ms + Rb was used as a secondary antibody.

The section was incubated in three rounds of staining: in the order of <u>ab256580</u> at 1/3000 dilution (0.324  $\mu$ g/ml) for 30mins, <u>ab238793</u> at 1/1000 dilution (2.26  $\mu$ g/ml) for 10mins and <u>ab255609</u> at 1/1000 dilution (0.615  $\mu$ g/ml) for 30 mins at room temperature. Each round was followed by a separate fluorescent tyramide signal amplification system.

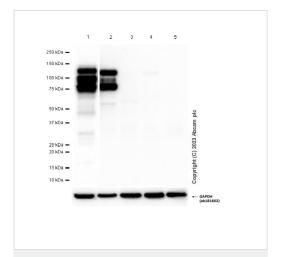
The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument with an Opal<sup>™</sup> 4-color kit. Image acquisition was performed with Leica SP8 confocal microscope.

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins. DAPI (blue) was used as a nuclear counter stain.

This data was developed using the same antibody clone in a different buffer formulation (<u>ab256580</u>).



Immunocytochemistry/ Immunofluorescence - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)



Western blot - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

**All lanes :** Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772) at 1/1000 dilution

**Lane 1 :** MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate

**Lane 2**: HepG2 (Human hepatocellular carcinoma epithelial cell) whole cell lysate

Lane 3 : A375 (Human malignant melanoma epithelial cell) whole cell lysate

**Lane 4 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

**Lane 5**: HT-1080 (Human fibrosarcoma epithelial cell) whole cell lysate

Lysates/proteins at 20 µg per lane.

## **Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

**Predicted band size:** 97 kDa **Observed band size:** 80-125 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

ab181602 was as GAPDH loading control.

Exposure time: Lane1: 3 seconds; Lane 2-5: 40 seconds.

A375, HeLa and HT-1080 were reported as negative or express low level of E cadherin (PMID: 30393081, PMID: 16980628, PMID:

34715746), PMID: 25411788).

Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772) at 1/1000 dilution + MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysate at 20 µg

## Secondary

Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size:** 97 kDa **Observed band size:** 80-125 kDa

1 250 kDa — 150 kDa — 100 kDa — 150 kDa — 150

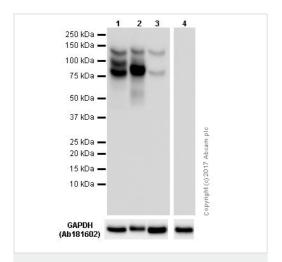
Western blot - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

Exposure time: 3.25 seconds.

Blocking and diluting buffer: 5% NFDM/TBST.

Full-length E Cadherin has a molecular weight of approximately 125 kDa. Other molecular weights between 80-100 kDa could also be observed depending on cell types or cell conditions.

PMID: 27274359, PMID: 26983597, PMID: 18478055, PMID: 22375065.



Western blot - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

**All lanes :** Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772) at 1/10000 dilution

**Lane 1 :** MCF7 (Human breast adenocarcinoma epithelial cell). Whole cell lysates

**Lane 2 :** HT-29 (Human colorectal adenocarcinoma epithelial cell). Whole cell lysates

**Lane 3 :** PC-3 (Human prostate adenocarcinoma epithelial cell) Whole cell lysates

**Lane 4 :** MDA-MB-231 (Human breast adenocarcinoma epithelial cell) Whole cell lysates (negative control)

Lysates/proteins at 20 µg per lane.

#### Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) ( $\underline{ab97051}$ ) at

1/100000 dilution

Performed under reducing conditions.

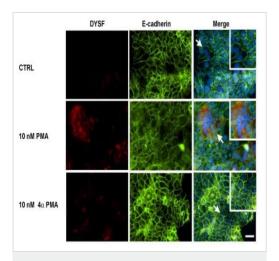
Predicted band size: 97 kDa

Exposure time: 23 seconds

Blocking and diluting buffer: 5% NFDM/TBST

Multi-bands can refer to PMID: 11212238; PMID: 14695147 and

PMID: 22659456

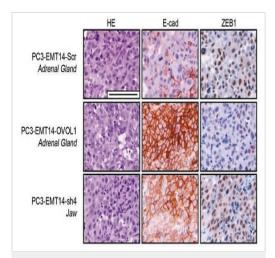


Immunocytochemistry/ Immunofluorescence - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

Omata, W. et al PLoS One. 2013 Nov 13;8(11):e81003. doi: 10.1371/journal.pone.0081003. eCollection 2013. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

# PMA induced cell fusion, DYSF expression, and activation of PKC in BeWo cells while $4\alpha PMA$ was inactive

Immunofluorescence analysis of BeWo cells treated with 0.25% DMSO (controls), 10 nM PMA, or 10 nM 4 $\alpha$ PMA for 72 h. The cells were then fixed and subsequently double-labeled for detection of DYSF (red) and E-cadherin (green). Nuclei were labeled with DAPI. While there can be a low level of spontaneous fusion in control cells (in our hands this ranges from about 4 to 9%), most cells are not fused and have at their borders intact E-cadherin labeling. Moreover, DYSF labeling was not detectable in non-fused BeWo cells. However, treatment of BeWo cells with 10 nM PMA for 72 h led to increased levels of cell fusion as indicated by the breakdown of E-cadherin labeling and the expression of DYSF in fused cells. When BeWo cells were treated with 10 nM 4 $\alpha$ PMA for 72 h there was no detectable increase in cell fusion or DYSF expression. Arrows indicate areas enlarged and placed in insets. Bar = 50  $\mu$ m.



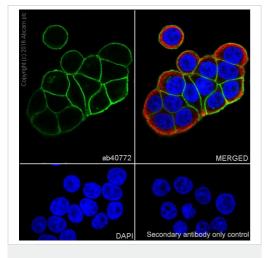
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-E Cadherin antibody

[EP700Y] - Intercellular Junction Marker (ab40772)

Roca, H. et al PLoS One. 2013 Oct 4;8(10):e76773. doi: 10.1371/journal.pone.0076773. eCollection 2013. Reproduced under the Creative Commons license http://creativecommons.org/licenses/by/4.0/

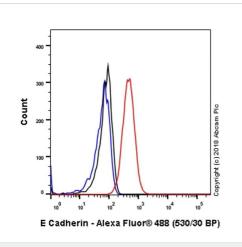
# Mesenchymal cancer cells show increased metastasis while not requiring MET for solid tumor formation.

ZEB1 or E-cadherin staining of metastases in ICI-mice. Note the higher E-cad and lower ZEB1 expression in the metastatic cells expressing OVOL1 or ZEB1-shRNA (sh4). Scale bar represents  $100~\mu m$ .



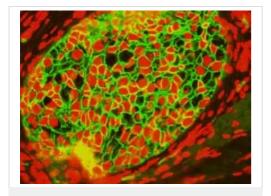
Immunocytochemistry/ Immunofluorescence - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772) ab40772 staining E Cadherin in HT-29 (Human colorectal adenocarcinoma) cells by ICC/IF

(Immunocytochemistry/Immunofluorescence). Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% tritonX-100. Samples were incubated with primary antibody at 1/500 dilution. An Alexa Fluor<sup>®</sup> 488 Goat anti-Rabbit (ab150077) was used as the secondary antibody at 1/1000 dilution. Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) (ab195889) at 1/200 dilution was used as a counterstain. DAPI was used as a nuclear counterstain. This is a confocal image showing membranous staining on HT-29 cell line.



Flow Cytometry (Intracellular) - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

Intracellular Flow Cytometry analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling E Cadherin with purified ab40772 at 1/30 dilution (10µg/ml) (red). 10<sup>6</sup> cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit lgG (Alexa Fluor<sup>®</sup> 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal lgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).

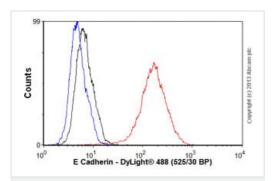


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-E Cadherin antibody

[EP700Y] - Intercellular Junction Marker (ab40772)

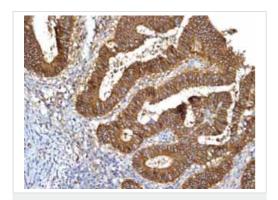
Fluorescent immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using unpurified ab40772. Green-E-Cadherin red-PI.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

Overlay histogram showing A431 (Human epidermoid carcinoma cell line) cells stained with unpurifiedab40772 (red line). $10^6$  cells were fixed with 80% methanol (5 minutes) and incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab40772, 1/1000 dilution) for 30 minute at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit lgG (H+L) (ab96899) at 1/500 dilution for 30 minutes at 22°C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (0.1 $\mu$ g/1x10 $^6$  cells) used under the same conditions. Unlabeled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

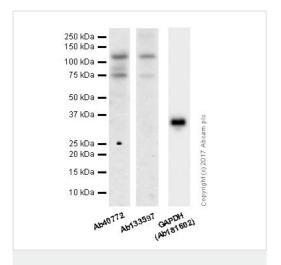


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-E Cadherin antibody

[EP700Y] - Intercellular Junction Marker (ab40772)

Formalin/PFA-fixed paraffin-embedded human colonic adenocarcinoma tissue stained for E Cadherin with unpurified ab40772 at a 1/500 dilution in immunohistochemical analysis.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

**Lane 1 :** Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772) at 1/5000 dilution

**Lane 2**: Anti-E Cadherin antibody [EPR699] (<u>ab133597</u>) at 1/2000 dilution

**Lane 3**: Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602)

**All lanes :** PC-3 (Human prostate adenocarcinoma epithelial cell) Whole cell lysates

Lysates/proteins at 20 µg per lane.

## Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000 dilution

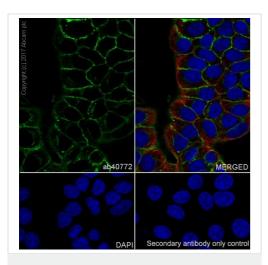
Predicted band size: 97 kDa

**Exposure time:** 3 minutes for ab40772 and <u>ab133597</u>, 32 seconds for GAPDH.

Blocking and diluting buffer: 5% NFDM/TBST

Multi-bands can refer to PMID: 11212238; PMID: 14695147 and

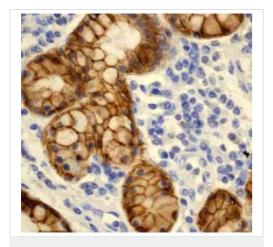
PMID: 22659456



Immunocytochemistry/ Immunofluorescence - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

Immunocytochemistry/Immunofluorescence analysis of MCF7 (human breast adenocarcinoma epithelial) cells labeling E Cadherin with ab40772. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% tritonX-100. Samples were then incubated with the primary antibody at a 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor<sup>®</sup> 488) (ab150077) secondary antibody at a 1/1000 dilution (green). The nuclear counter stain is DAPI (blue). Counterstained with ab195889 anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594) at a 1/200 dilution (red).

Confocal image shows membranous staining on MCF7 cell line.

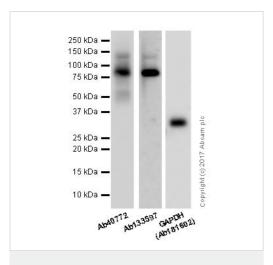


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-E Cadherin antibody

[EP700Y] - Intercellular Junction Marker (ab40772)

Formalin-fixed, paraffin-embedded human lung adenocarcinoma tissue stained for E Cadherin with unpurified ab40772 at a 1/500 dilution in immunohistochemical analysis.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

**Lane 1**: Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772) at 1/5000 dilution

**Lane 2 :** Anti-E Cadherin antibody [EPR699] (<u>ab133597</u>) at 1/2000 dilution

**Lane 3**: Anti-GAPDH antibody [EPR16891] - Loading Control (ab181602)

**All lanes :** HT-29 (Human colorectal adenocarcinoma epithelial cell). Whole cell lysates

Lysates/proteins at 20 µg per lane.

## **Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

**Predicted band size:** 97 kDa **Observed band size:** 80 kDa

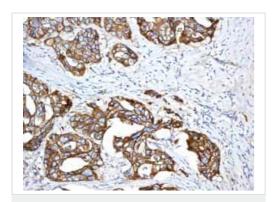
Exposure time: 1 second for ab40772, 3 minutes for <u>ab133597</u>,

32 seconds for GAPDH

Blocking and diluting buffer: 5% NFDM/TBST

Multi-bands can refer to PMID: 11212238; PMID: 14695147 and

PMID: 22659456

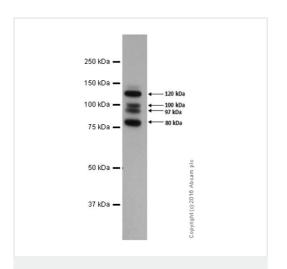


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-E Cadherin antibody

[EP700Y] - Intercellular Junction Marker (ab40772)

Formalin-fixed, paraffin-embedded human breast carcinoma tissue stained for E Cadherin with unpurified ab40772 at a 1/500 dilution in immunohistochemical analysis.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772)

Anti-E Cadherin antibody [EP700Y] - Intercellular Junction Marker (ab40772) at 1/200000 dilution (Unpurified) + MCF7 (Human breast adenocarcinoma ) whole cell lysates at 20  $\mu$ g

# Secondary

Goat Anti-Rabbit IgG H&L (HRP) at 1/1000 dilution

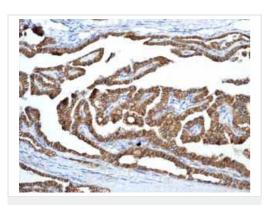
Predicted band size: 97 kDa

Observed band size: 100,120,80,97 kDa

Exposure time: 1 minute

Blocking and diluting buffer and concentration 5% NFDM/TBST.

The full-length of E-cadherin is 120 kDa. The other bands are due to proteolytic cleavages in different Cadherin domains. (Ref: PMID: 14695147)

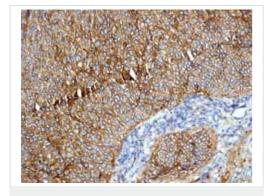


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-E Cadherin antibody

[EP700Y] - Intercellular Junction Marker (ab40772)

Formalin-fixed, paraffin-embedded human papillary carcinoma of thyroid gland tissue stained for E Cadherin with unpurified ab40772 at a 1/500 dilution in immunohistochemical analysis.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

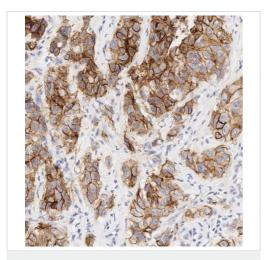


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-E Cadherin antibody

[EP700Y] - Intercellular Junction Marker (ab40772)

Formalin-fixed, paraffin-embedded human transitional cell carcinoma of kidney tissue stained for E Cadherin with unpurified ab40772 at a 1/500 dilution in immunohistochemical analysis.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

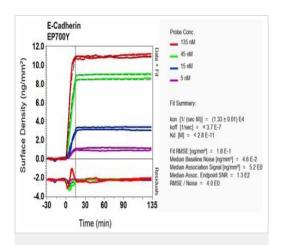


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-E Cadherin antibody

[EP700Y] - Intercellular Junction Marker (ab40772)

Immunohistochemistry of breast carcinoma staining E Cadherin with ab40772 at  $1\mu g/ml$ 

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Ol-RD Scanning - Anti-E Cadherin antibody

[EP700Y] - Intercellular Junction Marker (ab40772)

Produced using unpurified ab40772  $\mbox{Equilibrium disassociation constant } (\mbox{K}_D) \\ \mbox{Learn more about } \mbox{K}_D$ 

Click here to learn more about KD



Junction Marker (ab40772)

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