abcam

Product datasheet

Anti-E Cadherin antibody [M168] - C-terminal ab76055

17 Abreviews 370 References 画像数 5

製品の概要

製品名	Anti-E Cadherin antibody [M168] - C-terminal
製品の詳細	Mouse monoclonal [M168] to E Cadherin - C-terminal
由来種	Mouse
特異性	ab76055 does not cross react with VE Cadherin or N Cadherin.
アプリケーション	**適用あり:** IHC-P, Flow Cyt (Intra), ICC, WB
種交差性	**交差種:** Human
免疫原	Recombinant fragment corresponding to Mouse E Cadherin (C terminal).
ポジティブ・コントロール	WB: Human A431 cell lysate; IHC-P: Human colon tissue; ICC: A431 cells. Flow Cyt (intra): A431 cells
特記事項	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
バッファー	Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 50% Glycerol, PBS
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	M168
アイソタイプ	IgG1
軽鎖の種類	kappa

アプリケーション

The Abpromise guarantee **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab76055の使用に適用されます

アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P	★★★★★ (8)	Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
Flow Cyt (Intra)		1/100. **ab170190** - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.
ICC		Use at an assay dependent concentration.
WB	★★★★☆ (4)	1/100 - 1/1000. Predicted molecular weight: 97 kDa.

ターゲット情報

機能

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.

組織特異性

Non-neural epithelial tissues.

関連疾患

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.

配列類似性

Contains 5 cadherin domains.

翻訳後修飾

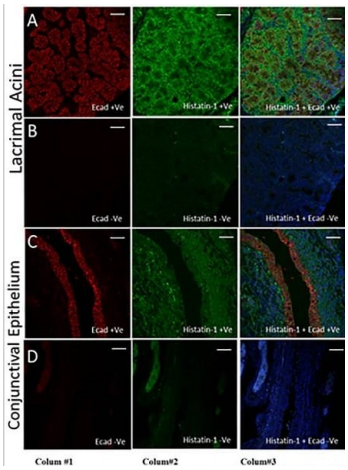
During apoptosis or with calcium influx, cleaved by a membrane-bound metalloproteinase (ADAM10), PS1/gamma-secretase and caspase-3 to produce fragments of about 38 kDa (E-CAD/CTF1), 33 kDa (E-CAD/CTF2) and 29 kDa (E-CAD/CTF3), respectively. Processing by the metalloproteinase, induced by calcium influx, 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.

細胞内局在

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.

画像

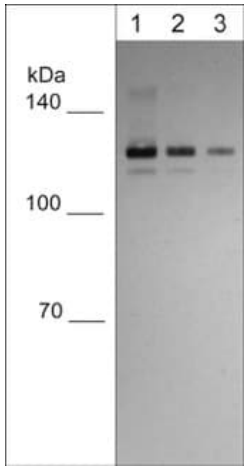


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-E Cadherin antibody [M168] - C-terminal (ab76055)

Shah et al PLoS One. 2016 Jan 29;11(1):e0148018. doi: 10.1371/journal.pone.0148018. eCollection 2016. Fig 2. Reproduced under the Creative Commons license https://creativecommons.org/publicdomain/zero/1.0/

Immunohistochemistry staining of E Cadherin in human MMCR (Muller's muscle conjunctival resection) tissue.

Xylene and rehydration with serial ethanol dilutions were used for deparaffinization. Slides were washed twice for 5 minutes in 0.25% Triton X-100 for permeabilization and blocked for 2 hours at room temperature with 2% BSA and 10% normal donkey serum in PBS. Slides were incubated overnight at 4°C with ab76055. The next day, the slides were washed twice for 5 minutes in PBS and incubated for 1–2 hours with respective secondary antibodies diluted in blocking solution (1:200–800). Vecta shield mounting medium with 4′,6-diamidino-2-phenylindole (DAPI) was placed over the slides and covered with a glass coverslip. Slides were analyzed using the Zeiss LSM 710 Confocal Microscope.



Western blot - Anti-E Cadherin antibody [M168] - C-terminal (ab76055)

Lane 1 : Anti-E Cadherin antibody [M168] - C-terminal (ab76055) at 1/1000 dilution
Lane 2 : Anti-E Cadherin antibody [M168] - C-terminal (ab76055) at 1/2000 dilution
Lane 3 : Anti-E Cadherin antibody [M168] - C-terminal (ab76055) at 1/4000 dilution

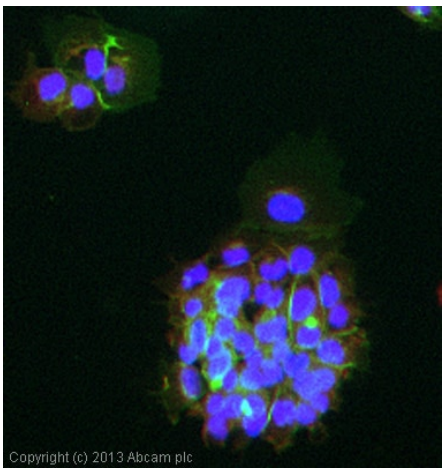
All lanes : A431 (Human epidermoid carcinoma cell line) denatured whole cell lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 97 kDa

Exposure time: 2 minutes

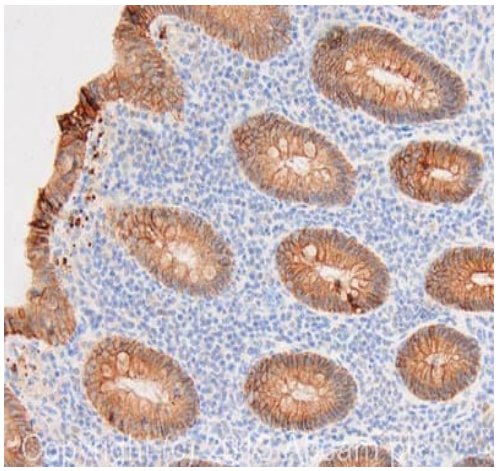
Blocked and probed in the presence of 5% milk, and the image was captured using chemiluminescence and film.



Immunocytochemistry - Anti-E Cadherin antibody [M168] - C-terminal (ab76055)

ICC/IF image of ab76055 stained A431 (Human epidermoid carcinoma cell line) cells.

The cells were 4% formaldehyde fixed (10 minutes) and then incubated in 1% BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1 hour to permeabilize the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab76055, 1/100 dilution) overnight at +4°C. The secondary antibody (green) was **ab96879**, DyLight® 488 goat anti-mouse IgG (H+L) used at a 1/250 dilution for 1 hour. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1 hour. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43 µM.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-E Cadherin antibody [M168] - C-terminal (ab76055)

IHC image of E Cadherin staining in human colon formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer pH 6, for 20 minutes. The section was then incubated with ab76055, 5 µg/ml, for 15 minutes at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

Flow Cytometry (Intracellular) - Anti-E Cadherin antibody [M168] - C-terminal (ab76055)

Overlay histogram showing A431 (Human epidermoid carcinoma cell line) cells stained with ab76055 (red line).

The cells were fixed with 4% paraformaldehyde (10 minutes) and then permeabilized with 0.1% PBS-Tween for 20 minutes. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by

the antibody (ab76055, 1/100 dilution) for 30 minutes at 22ºC. The secondary antibody used was a DyLight® 488 goat anti-mouse IgG (H+L) **ab96879** at 1/500 dilution for 30 minutes at 22ºC. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2 µg/1x10^6 cells) used under the same conditions.

Acquisition of >5,000 events was performed.

This antibody gave a positive signal in A431 cells fixed with 80% methanol (5 minutes)/permeabilized with 0.1% PBS-Tween for 20 minutes used under the same conditions.