

Anti-EpCAM antibody ab71916

★★★★☆ **20 Abreviews** **145 References** 画像数 5

製品の概要

製品名	Anti-EpCAM antibody
製品の詳細	Rabbit polyclonal to EpCAM
由来種	Rabbit
アプリケーション	適用あり: ICC/IF, IHC-P, WB
種交差性	交差種: Mouse, Rat, Human
免疫原	Synthetic peptide within Human EpCAM aa 250 to the C-terminus (internal sequence) conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. (Peptide available as ab71915)
ポジティブ・コントロール	WB: HCT 116, SW480, Caco 2, HuES7 and HepG2 whole cell lysates; Mouse and rat colon tissue lysates. IHC-P: Human breast adenocarcinoma, breast and breast carcinoma (Grade 2 Invasive Ductal Carcinoma) tissues. ICC/IF: HT29 cells.
特記事項	<p>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.</p> <p>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</p>

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: PBS</p> <p>Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.</p>
精製度	Immunogen affinity purified

ポリクローナル
IgG

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ab71916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確認ください。

アプリケーション	Abreviews	特記事項
ICC/IF	★★★★☆ (5)	Use a concentration of 1 - 5 µg/ml.
IHC-P	★★★★★ (3)	1/40 - 1/160.
WB	★★★★★ (6)	Use a concentration of 1 µg/ml. Detects a band of approximately 35 kDa (predicted molecular weight: 35 kDa).

機能	May act as a physical homophilic interaction molecule between intestinal epithelial cells (IECs) and intraepithelial lymphocytes (IELs) at the mucosal epithelium for providing immunological barrier as a first line of defense against mucosal infection. Plays a role in embryonic stem cells proliferation and differentiation. Up-regulates the expression of FABP5, MYC and cyclins A and E.
組織特異性	Highly and selectively expressed by undifferentiated rather than differentiated embryonic stem cells (ESC). Levels rapidly diminish as soon as ESC's differentiate (at protein levels). Expressed in almost all epithelial cell membranes but not on mesodermal or neural cell membranes. Found on the surface of adenocarcinoma.
関連疾患	Defects in EPCAM are the cause of diarrhea type 5 (DIAR5) [MIM:613217]. It is an intractable diarrhea of infancy characterized by villous atrophy and absence of inflammation, with intestinal epithelial cell dysplasia manifesting as focal epithelial tufts in the duodenum and jejunum. Defects in EPCAM are a cause of hereditary non-polyposis colorectal cancer type 8 (HNPCC8) [MIM:613244]. HNPCC is a disease associated with marked increase in cancer susceptibility. It is characterized by a familial predisposition to early-onset colorectal carcinoma (CRC) and extra-colonic tumors of the gastrointestinal, urological and female reproductive tracts. HNPCC is reported to be the most common form of inherited colorectal cancer in the Western world. Clinically, HNPCC is often divided into two subgroups. Type I is characterized by hereditary predisposition to colorectal cancer, a young age of onset, and carcinoma observed in the proximal colon. Type II is characterized by increased risk for cancers in certain tissues such as the uterus, ovary, breast, stomach, small intestine, skin, and larynx in addition to the colon. Diagnosis of classical HNPCC is based on the Amsterdam criteria: 3 or more relatives affected by colorectal cancer, one a first degree relative of the other two; 2 or more generation affected; 1 or more colorectal cancers presenting before 50 years of age; exclusion of hereditary polyposis syndromes. The term 'suspected HNPCC' or 'incomplete HNPCC' can be used to describe families who do not or only partially fulfill the Amsterdam criteria, but in whom a genetic basis for colon cancer is strongly suspected. Note=HNPCC8 results from heterozygous deletion of 3-prime exons of EPCAM and intergenic regions directly upstream of MSH2, resulting in transcriptional read-through and epigenetic silencing of MSH2 in tissues expressing EPCAM.
配列類似性	Belongs to the EPCAM family.

Contains 1 thyroglobulin type-1 domain.

翻訳後修飾

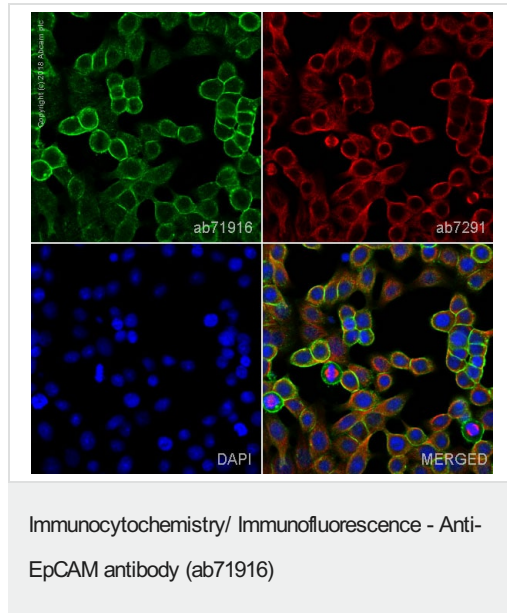
Hyperglycosylated in carcinoma tissue as compared with autologous normal epithelia.

Glycosylation at Asn-198 is crucial for protein stability.

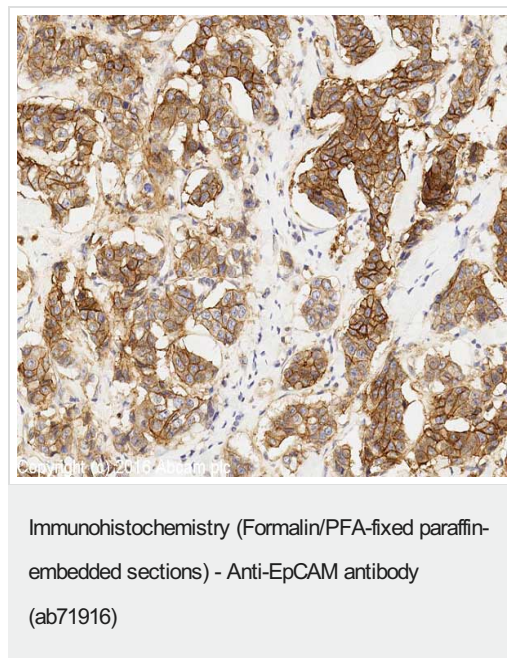
細胞内局在

Lateral cell membrane. Cell junction > tight junction. Co-localizes with CLDN7 at the lateral cell membrane and tight junction.

画像



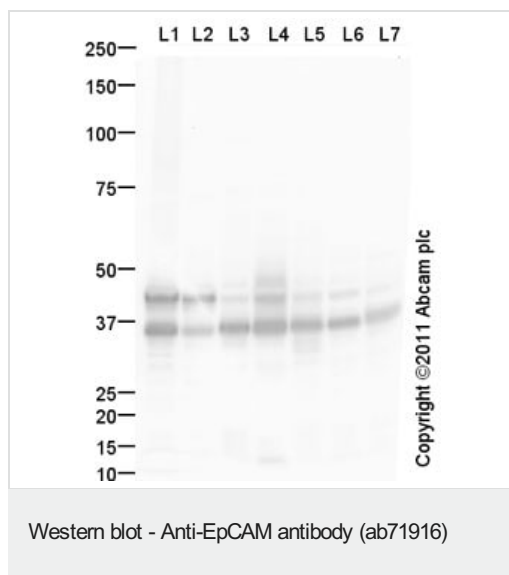
ab71916 staining EpCam in HT29 cells. The cells were fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab71916 at 1µg/ml and **ab7291**, Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control, at 1/1000 dilution. Cells were then incubated with **ab150120**, Goat polyclonal Secondary Antibody to Mouse at 1/1000 dilution (shown in pseudocolour red) and **ab150081**, Goat polyclonal Secondary Antibody to Rabbit IgG at 1/1000 dilution (shown in green). Nuclear DNA was labelled with DAPI (shown in blue).



IHC image of EpCAM staining in human breast adenocarcinoma 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 (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with **ab75962**, 1µg/ml, for 15 mins 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.

**Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre*



All lanes : Anti-EpCAM antibody (ab71916) at 1 µg/ml

Lane 1 : Colon (Mouse) Tissue Lysate

Lane 2 : Colon (Rat) Tissue Lysate

Lane 3 : HCT 116 (Human Colorectal Carcinoma) Whole Cell Lysate

Lane 4 : SW480 (Human colon adenocarcinoma cell line) Whole Cell Lysate

Lane 5 : Caco 2 (Human colonic carcinoma cell line) Whole Cell Lysate

Lane 6 : HuES7 (Human embryonic stem cell line) Whole Cell Lysate

Lane 7 : HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

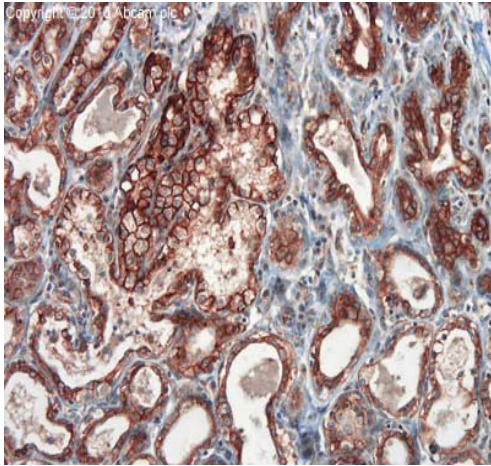
Performed under reducing conditions.

Predicted band size: 35 kDa

Observed band size: 35 kDa

Additional bands at: 40 kDa. We are unsure as to the identity of these extra bands.

Secondary antibody - goat **anti-rabbit HRP** (H&L preadsorbed; [ab97080](#))

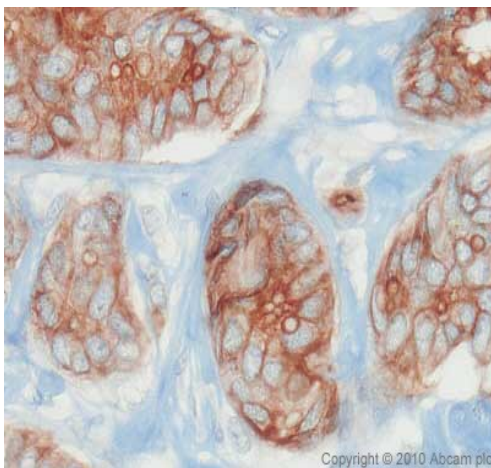


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EpCAM antibody (ab71916)

ab71916 (1:160) staining EpCAM in paraffin-embedded human breast tissue, using an automated system (Ventana Discovery). Using this protocol there is strong membrane staining of the basolateral membranes of normal breast epithelial cells of breast ducts and lobular acini. There is associated weak to moderate staining of the cytoplasm of these cells.

Sections were rehydrated and antigen retrieved in CC1 Cell Conditioning Buffer using Ventana Standard Retrieval programme. Slides were blocked in 3% H₂O₂ / 4 min / 37°C and incubated with ab71916 (1:160 dilution / 2 hours / 37°C). Sections then blocked (4mins / 37°C) and incubated with Dako swine anti-rabbit antibody (1:50, 28 min / 37°C). Staining was amplified and detected by incubation with Ventana Streptavidin ABC system (16 min / 37°C) and Ventana DAB map reagent (8 min / 37°C). Slides were counterstained with Haematoxylin and coverslipped in DPX.

For manua



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-EpCAM antibody (ab71916)

ab71916 (1:40) staining EpCAM in paraffin-embedded human breast carcinoma (Grade 2 Invasive Ductal Carcinoma) using an automated system (Ventana Discovery). Using this protocol there is moderate to strong membrane staining in carcinoma cells which may be apical or complete instead of basolateral. There is associated moderate to strong staining of the cytoplasm of these cells.

Sections were rehydrated and antigen retrieved in CC1 Cell Conditioning Buffer using Ventana Standard Retrieval programme. Slides were blocked in 3% H₂O₂ / 4 min / 37°C and incubated with ab71916 (1:40 dilution / 1 hour / 37°C). Sections then blocked (4mins / 37°C) and incubated with Dako swine anti-rabbit antibody (1:50, 28 min / 37°C). Staining was amplified and detected by incubation with Ventana Streptavidin ABC system (16 min / 37°C) and Ventana DAB map reagent (8 min / 37°C). Slides were counterstained with Haematoxylin and coverslipped in D

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