

### Anti-EpCAM antibody [E144] ab32392

KO 評価済 リコンビナント RabMAb

★★★★★ **19 Abreviews** **59 References** **画像数 5**

#### 製品の概要

製品名	Anti-EpCAM antibody [E144]
製品の詳細	Rabbit monoclonal [E144] to EpCAM
由来種	Rabbit
アプリケーション	<b>適用あり:</b> WB <b>適用なし:</b> ICC/IF, IHC-Fr or IP
種交差性	<b>交差種:</b> Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: HCT 116, A431, MCF7, Mouse colon tissue, and Rat colon tissue.
特記事項	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"><li>- High batch-to-batch consistency and reproducibility</li><li>- Improved sensitivity and specificity</li><li>- Long-term security of supply</li><li>- Animal-free production</li></ul> For more information <a href="#">see here</a> . Our RabMAb <sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a> .

#### 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	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture supernatant
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	E144
アイソタイプ	IgG

## アプリケーション

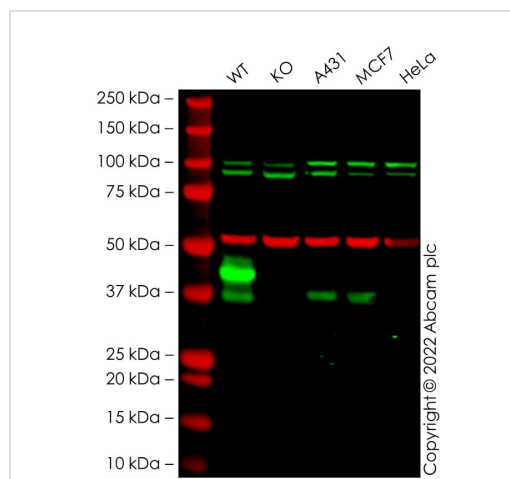
**The Abpromise guarantee** **Abpromise保証は、次のテスト済みアプリケーションにおけるab32392の使用に適用されます**  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB	★★★★☆ (3)	1/1000 - 1/10000. Predicted molecular weight: 39 kDa.

**追加情報** Is unsuitable for ICC/IF, IHC-Fr or IP.

## ターゲット情報

<b>機能</b>	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.
<b>組織特異性</b>	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.
<b>関連疾患</b>	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 (HNPC8) [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.
<b>配列類似性</b>	Belongs to the EPCAM family. Contains 1 thyroglobulin type-1 domain.
<b>翻訳後修飾</b>	Hyperglycosylated in carcinoma tissue as compared with autologous normal epithelia. Glycosylation at Asn-198 is crucial for protein stability.
<b>細胞内局在</b>	Lateral cell membrane. Cell junction > tight junction. Co-localizes with CLDN7 at the lateral cell membrane and tight junction.



Western blot - Anti-EpCAM antibody [E144]  
(ab32392)

**All lanes** : Anti-EpCAM antibody [E144] (ab32392) at 1/1000 dilution

**Lane 1** : Wild-type HCT 116 cell lysate

**Lane 2** : EPCAM knockout HCT 116 cell lysate

**Lane 3** : A431 cell lysate

**Lane 4** : MCF7 cell lysate

**Lane 5** : HeLa cell lysate

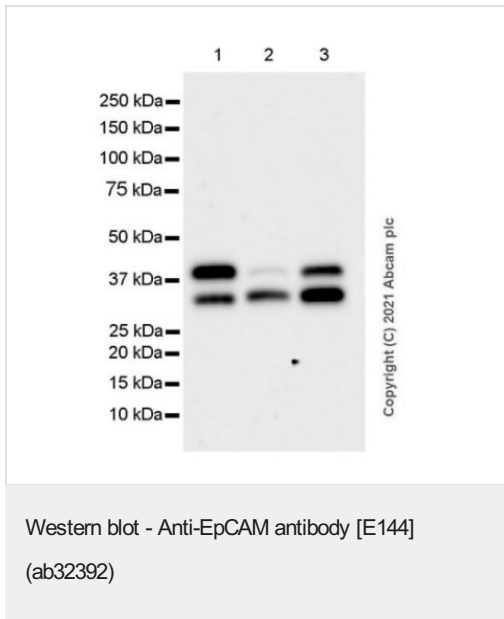
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 39 kDa

**Observed band size:** 37-45 kDa

False colour image of Western blot: Anti-EpCAM antibody [E144] staining at 1/1000 dilution, shown in green; Mouse anti-Alpha Tubulin [DM1A] ([ab7291](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab32392 was shown to bind specifically to EpCAM. A band was observed at 37/45 kDa in wild-type HCT 116 cell lysates with no signal observed at this size in EPCAM knockout cell line [ab281596](#) (knockout cell lysate [ab282948](#)). To generate this image, wild-type and EPCAM knockout HCT 116 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 5 % milk in TBS-0.1 % Tween<sup>®</sup> 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 (IRDye<sup>®</sup> 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



**All lanes :** Anti-EpCAM antibody [E144] (ab32392) at 1/1000 dilution

**Lane 1 :** Mouse colon tissue lysate

**Lane 2 :** Rat small intestine tissue lysate

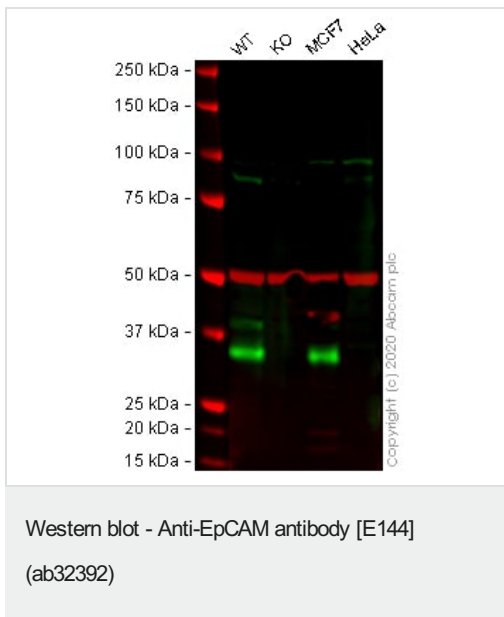
**Lane 3 :** Rat colon tissue lysate

Lysates/proteins at 20 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

**Predicted band size:** 39 kDa



**All lanes :** Anti-EpCAM antibody [E144] (ab32392) at 1/2000 dilution

**Lane 1 :** Wild-type A431 cell lysate

**Lane 2 :** EPCAM knockout A431 cell lysate

**Lane 3 :** MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

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

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

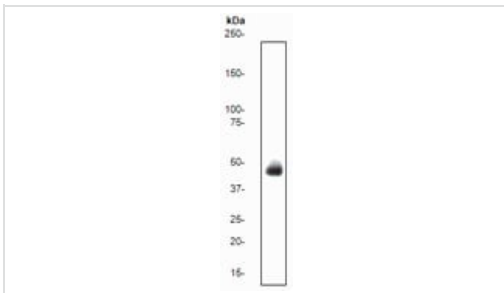
**Predicted band size:** 39 kDa

**Observed band size:** 40 kDa

**Lanes 1 - 4:** Merged signal (red and green). Green - ab32392 observed at 40 kDa. Red - loading control [ab7291](#) (Mouse anti-Alpha Tubulin [DM1A]) observed at 55kDa.

ab32392 was shown to react with EpCAM in wild-type A431 cells in western blot with loss of signal observed in EpCAM knockout

sample. Wild-type and EpCAM knockout A431 cell lysates were subjected to SDS-PAGE. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with ab32392 and **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) overnight at 4°C at a 1 in 2000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.






Western blot - Anti-EpCAM antibody [E144]  
(ab32392)

Anti-EpCAM antibody [E144] (ab32392) at 1/2500 dilution + A431 cell lysate

**Predicted band size:** 39 kDa

Why choose a recombinant antibody?

 <b>Research with confidence</b> Consistent and reproducible results	 <b>Long-term and scalable supply</b> Recombinant technology
 <b>Success from the first experiment</b> Confirmed specificity	 <b>Ethical standards compliant</b> Animal-free production

Anti-EpCAM antibody [E144] (ab32392)

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