# abcam

### **Product datasheet**

## Anti-EpCAM antibody [EPR677(2)] ab124825

אילשעבע RabMAb

★★★★★★ 1 Abreviews 10 References 画像数 13

#### 製品の概要

製品名	Anti-EpCAM antibody [EPR677(2)]
製品の詳細	Rabbit monoclonal [EPR677(2)] to EpCAM
由来種	Rabbit
アプリケーション	適用あり: WB, IHC-P 適用なし: Flow Cyt,ICC/IF or IP
種交差性	交差種: Human
免疫原	Synthetic peptide within Human EpCAM aa 50-150. The exact sequence is proprietary. Database link: <b>P16422</b>
ポジティブ・コントロール	WB: HCT116, A431 and HT29 cell lysates. IHC-P: Human colon adenocarcinoma, colon, endometrial adenocarcinoma and stomach adenocarcinoma tissues.
特記事項	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <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> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb<sup>®</sup> patents</u>.</li> </ul>

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. Stable for 12 months at -20°C.
パッファー	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
精製度	Protein A purified
ポリ/モノ	モノクローナル

#### 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ab124825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		1/1000 - 1/10000. Detects a band of approximately 39 kDa (predicted molecular weight: 35 kDa). Western blots of mouse and rat samples are negative.
IHC-P	★ ☆ ☆ ☆ ☆ (1)	1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. Heat up to 98 degrees C, below boiling, and then let cool for 10- 20 min.

追加情報

機能

Is unsuitable for Flow Cyt, ICC/IF or IP.

ターゲット情報

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.

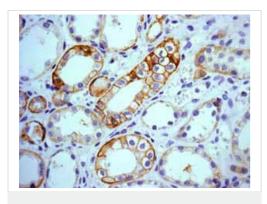
組織特異性 Highly and selectively expressed by undifferentiated rather than differentiated embryonic stem cells (ESC). Levels rapidly diminish as soon as ESC's differentiate (at protein levels). Expressed in almost all epithelial cell membranes but not on mesodermal or neural cell membranes. Found on the 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 extracolonic 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.

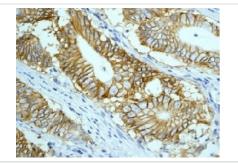
#### 画像



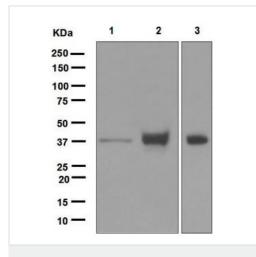
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EpCAM antibody [EPR677(2)] (ab124825)

ab124825 showing positive staining in Normal kidney tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EpCAM antibody [EPR677(2)] (ab124825) ab124825, at 1/100 dilution, staining EpCAM in paraffin-embedded Human colon adenocarcinoma tissue by Immunohistochemistry. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Western blot - Anti-EpCAM antibody [EPR677(2)] (ab124825) All lanes : Anti-EpCAM antibody [EPR677(2)] (ab124825) at 1/1000 dilution

Lane 1 : HCT116 cell lysate Lane 2 : A431 cell lysate Lane 3 : HT29 cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes : Goat anti-Rabbit HRP at 1/2000 dilution

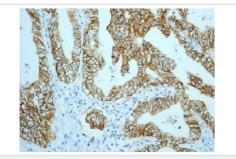
Predicted band size: 35 kDa

ab124825, at 1/100 dilution, staining EpCAM in paraffin-embedded Human colon tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

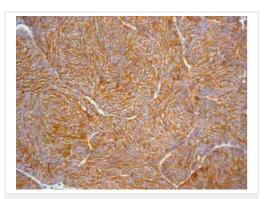


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EpCAM antibody [EPR677(2)] (ab124825)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EpCAM antibody [EPR677(2)] (ab124825) ab124825, at 1/100 dilution, staining EpCAM in paraffin-embedded Human endometrial adenocarcinoma tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



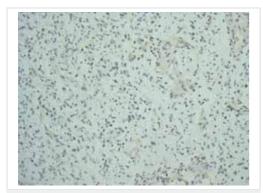
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EpCAM antibody [EPR677(2)] (ab124825) ab124825 showing positive staining in Urinary bladder transitional carcinoma tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EpCAM antibody [EPR677(2)] (ab124825) ab124825 showing negative staining in Normal brain tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EpCAM antibody [EPR677(2)] (ab124825)

ab124825 showing negative staining in Glioma tissue.

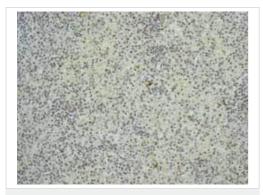
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



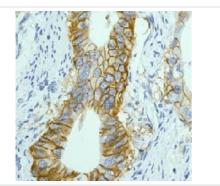
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EpCAM antibody [EPR677(2)] (ab124825)

ab124825 showing negative staining in Skeletal muscle tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EpCAM antibody [EPR677(2)] (ab124825)



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EpCAM antibody [EPR677(2)] (ab124825) ab124825 showing negative staining in Normal tonsil tissue.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

ab124825, at 1/100 dilution, staining EpCAM in paraffin-embedded Human stomach adenocarcinoma tissue by Immunohistochemistry. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

Normal fissue samples			Malignant fissue samples				
Human cardiac muscle	x	Human placenta	x	Clear cell carcinoma of human kidney	×	Human glioma	x
luman cerebrum	x	Human skeletal muscle	x	Human bladder cancer	1	Human hepatocellular carcinoma	x
Human colon	1	Human skin	1	Human breast carcinoma	×	Human lung carcinoma	1
Human endometrium	1	Human spleen	x	Human cervical carcinoma	×	Human ovarian carcinoma	1
Human kidney	1	Human stomach	x	Human colon carcinoma	1	Human pancreatic carcinoma	x
Human liver	x	Humon testis	x	Human endometrial carcinoma	✓	Human prostatic hyperplasia	x
Human lung	x	Human thyroid	x	Human gastric carcinoma	1	Human thyroid carcinoma	x
luman mammary gland	1	Human tonsil	x				
Human pancreas	1						

Tissue Microarrays stained for "Anti-EpCAM antibody [EPR677(2)]" using "ab124825" in immunohistochemical analysis. This table provides a detailed overview of positive (tick mark) and negative (cross mark) staining per sample type tested. The sections were pre-treated using Heat mediated antigen retrieval using Bond<sup>™</sup> Epitope Retrieval Solution 2 (pH 9.0) for 20 minutes. The sections were incubated with ab124825 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<sup>®</sup> RX instrument.

Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-EpCAM antibody [EPR677(2)] (ab124825)



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