


### Anti-FAK antibody [EP695Y] ab40794

KO 評価済 リコンビナント RabMAb

★★★★★ 9 Abreviews 132 References 画像数 9

#### 製品の概要

製品名	Anti-FAK antibody [EP695Y]
製品の詳細	Rabbit monoclonal [EP695Y] to FAK
由来種	Rabbit
特異性	ab40794 recognises Focal adhesion kinase (FAK).  The mouse and rat recommendation is based on the WB results. We do not guarantee IHC-P for mouse and rat.
アプリケーション	適用あり: IHC-P, WB
種交差性	交差種: Mouse, Rat, Human  交差が予測される動物種: Cow 
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: NIH/3T3, HeLa, A431, HEK-293T and K-562 cell lysates; Rat tissue lysate. IHC-P: Human hepatocellular carcinoma.
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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
バッファー	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: PBS, 0.05% BSA, 40% Glycerol

精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EP695Y
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ab40794の使用に適用されます

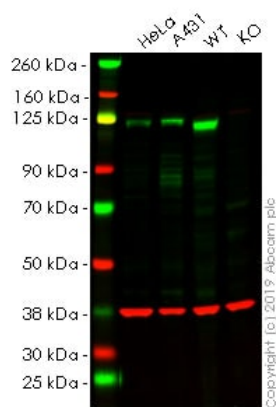
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
IHC-P	★★★★★ (3)	1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. The mouse, rat and cow recommendation is based on the WB results. We do not guarantee IHC-P for mouse, rat and cow. See <a href="#">IHC antigen retrieval protocols</a> .
WB	★★★★★ (3)	1/2000. Detects a band of approximately 125 kDa (predicted molecular weight: 119 kDa). <b>For unpurified use at 1/1000</b>

## ターゲット情報

機能	Non-receptor protein-tyrosine kinase implicated in signaling pathways involved in cell motility, proliferation and apoptosis. Activated by tyrosine-phosphorylation in response to either integrin clustering induced by cell adhesion or antibody cross-linking, or via G-protein coupled receptor (GPCR) occupancy by ligands such as bombesin or lysophosphatidic acid, or via LDL receptor occupancy. Microtubule-induced dephosphorylation at Tyr-397 is crucial for the induction of focal adhesion disassembly. Plays a potential role in oncogenic transformations resulting in increased kinase activity.
組織特異性	Expressed in all organs tested, in lymphoid cell lines, but most abundantly in brain.
配列類似性	Belongs to the protein kinase superfamily. Tyr protein kinase family. FAK subfamily. Contains 1 FERM domain. Contains 1 protein kinase domain.
ドメイン	The first Pro-rich domain interacts with the SH3 domain of CRK-associated substrate (BCAR1) and CASL. The carboxy-terminal region is the site of focal adhesion targeting (FAT) sequence which mediates the localization of FAK1 to focal adhesions.
翻訳後修飾	Phosphorylated on 6 tyrosine residues upon activation. Microtubule-induced dephosphorylation at Tyr-397 could be catalyzed by PTPN11 and regulated by ZFYVE21. Dephosphorylated by PTPN11 upon EPHA2 activation by its ligand EFNA1.
細胞内局在	Cell junction > focal adhesion. Cell membrane. Constituent of focal adhesions.

## 画像



Western blot - Anti-FAK antibody [EP695Y]  
(ab40794)

**All lanes :** Anti-FAK antibody [EP695Y] (ab40794) at 1/1000 dilution

**Lane 1 :** HeLa cell lysate

**Lane 2 :** A431 cell lysate

**Lane 3 :** Wild-type HEK-293T cell lysate

**Lane 4 :** PTK2 knockout HEK-293T cell lysate

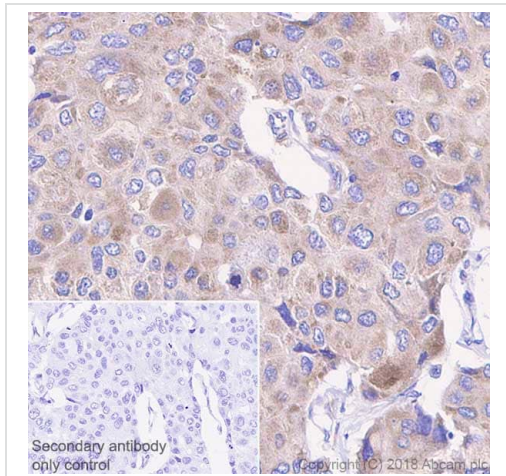
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 119 kDa

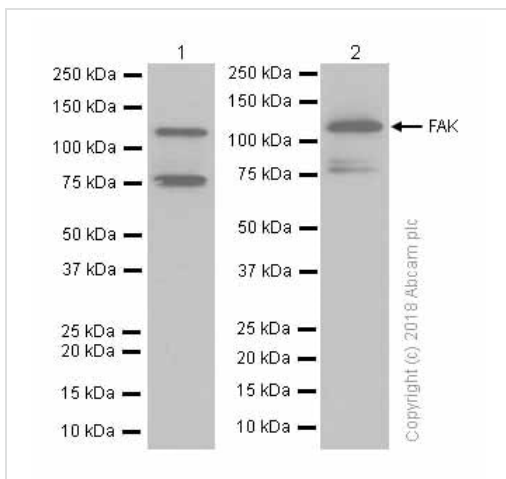
**Lanes 1 - 4:** Merged signal (red and green). Green - ab40794 observed at 119 kDa. Red - loading control, **ab8245** observed at 37 kDa.

ab40794 was shown to react with FAK in wild-type HEK-293T cells. Loss of signal was observed when knockout cell line **ab255421** (knockout cell lysate **ab263766**) was used. Wild-type and FAK knockout samples were subjected to SDS-PAGE. ab40794 and Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FAK antibody [EP695Y] (ab40794)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human hepatocellular carcinoma tissue sections labeling FAK with purified ab40794 at 1:250 dilution (2.32 µg/ml). Heat mediated antigen retrieval was performed Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-FAK antibody [EP695Y] (ab40794)

**Lane 1 :** Anti-FAK antibody [EP695Y] (ab40794) at 1/2000 dilution (Purified)

**Lane 2 :** Anti-FAK antibody [EP695Y] (ab40794) at 1/2000 dilution

**Lane 1 :** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

**Lane 2 :** K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysates

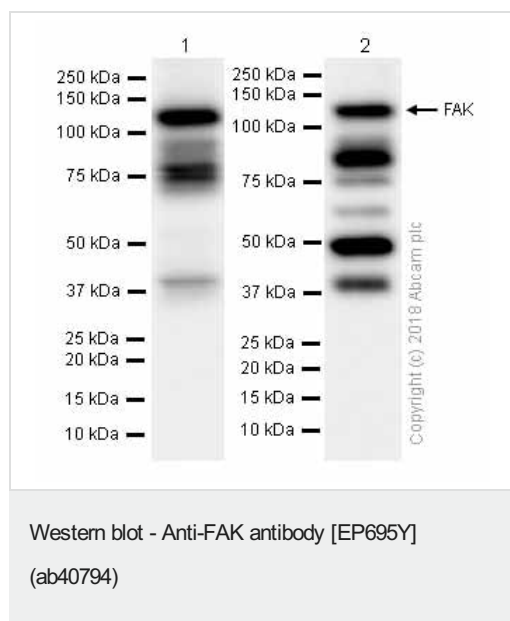
Lysates/proteins at 20 µg per lane.

## Secondary

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

**Predicted band size:** 119 kDa

**Observed band size:** 119 kDa



**Lane 1 :** Anti-FAK antibody [EP695Y] (ab40794) at 1/2000 dilution (Purified)

**Lane 2 :** Anti-FAK antibody [EP695Y] (ab40794) at 1/1000 dilution

**Lane 1 :** NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates

**Lane 2 :** Rat brain lysates

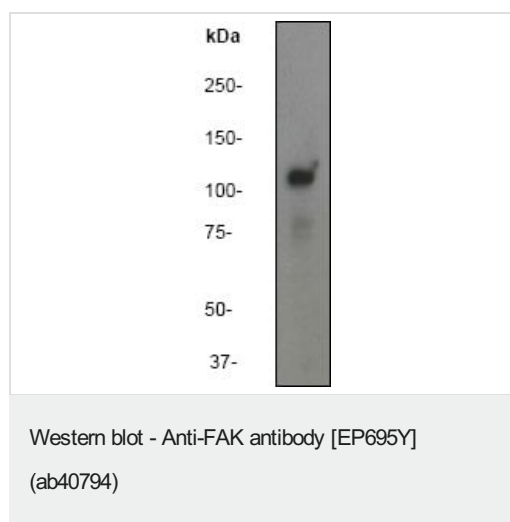
Lysates/proteins at 20 µg per lane.

#### Secondary

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

**Predicted band size:** 119 kDa

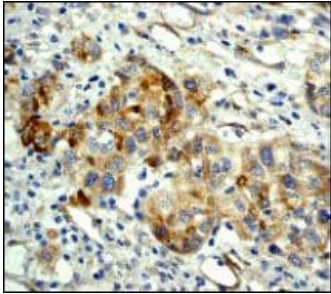
**Observed band size:** 119 kDa



Anti-FAK antibody [EP695Y] (ab40794) at 1/1000 dilution + HeLa cell lysate

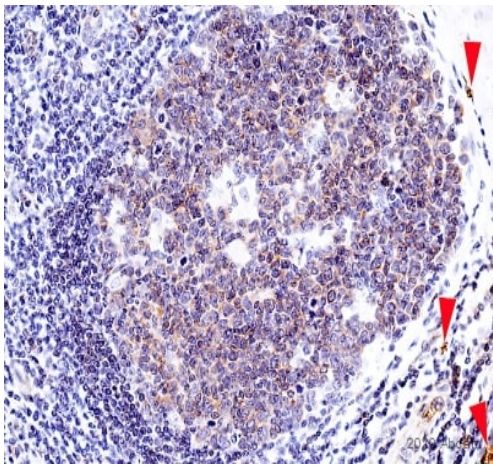
**Predicted band size:** 119 kDa

**Observed band size:** 119 kDa



Immunohistochemical analysis of paraffin-embedded human hepatocellular carcinoma using ab40794.

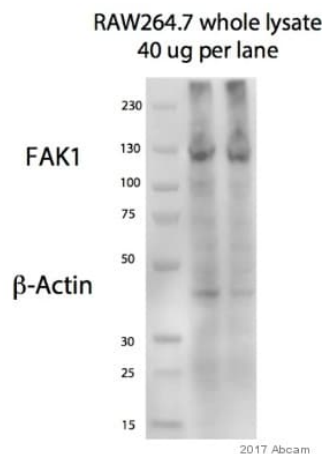
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FAK antibody [EP695Y] (ab40794)



The image shows FAK antibody (ab40794) in human spleen tissue. Clear cytoplasmic positivity in a subset of germinal centre cells. There is intense positivity of the serum in the blood vessels. Endogenous peroxidases were blocked using 2% H<sub>2</sub>O<sub>2</sub> for 15 minutes.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FAK antibody [EP695Y] (ab40794)

This image is courtesy of an abstract submitted by Carl Hobbs, King's College London, United Kingdom



Western blot - Anti-FAK antibody [EP695Y]  
(ab40794)

This image is courtesy of an AReview submitted by  
Magali Boissiere (6970246)

**All lanes :** Anti-FAK antibody [EP695Y] (ab40794)

**All lanes :** Milk PBS Tween

Blocking peptides at 5 % per lane.

### Secondary

**All lanes :** HRP conjugated goat anti-rabbit poly clonal at 1/5000  
dilution

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 119 kDa

**Observed band size:** 130 kDa

**Exposure time:** 5 minutes

Western blot analysis of RAW264.7 cells lysate (40µg/lane)  
labelling FAK with ab40794 at 1/5000 in 5% Milk PBS Tween for  
16 hours at 4°C. A HRP conjugated goat anti-rabbit poly clonal  
(1/5000) was used as the secondary antibody.

### Why choose a recombinant antibody?



**Research with  
confidence**  
Consistent and  
reproducible results



**Long-term and  
scalable supply**  
Recombinant  
technology



**Success from the  
first experiment**  
Confirmed  
specificity



**Ethical standards  
compliant**  
Animal-free  
production

Anti-FAK antibody [EP695Y] (ab40794)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### **Our Abpromise to you: Quality guaranteed and expert technical support**

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
  
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.co.jp/abpromise> or contact our technical team.

### **Terms and conditions**

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors