

### Anti-IKB beta antibody [EPR5037] ab109509

KO 評価済 リコンビナント RabMAb

★★★★☆ 2 Abreviews 10 References 画像数 9

#### 製品の概要

製品名	Anti-IKB beta antibody [EPR5037]
製品の詳細	Rabbit monoclonal [EPR5037] to IKB beta
由来種	Rabbit
アプリケーション	適用あり: ICC/IF, Flow Cyt (Intra), WB, IP, IHC-P
種交差性	交差種: 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: Jurkat, HeLa, THP-1, and MCF7 cell lysates. IP: HeLa cells. IHC-P: Human kidney tissue. ICC/IF: Jurkat cells. Flow Cyt (intra): Jurkat cells.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <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> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb® patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

#### 製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
バッファー	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR5037

アイソタイプlgG

アプリケーション

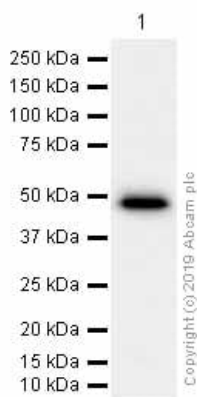
**The Abpromise guarantee**      **Abpromise保証は、** 次のテスト済みアプリケーションにおけるab109509の使用に適用されます  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		1/50. <b>For unpurified use at 1/100 - 1/250.</b>
Flow Cyt (Intra)		1/20.
WB	★★★★★ (2)	1/1000 - 1/10000. Detects a band of approximately 48 kDa (predicted molecular weight: 37 kDa).
IP		1/10 - 1/100.
IHC-P		1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. See <b><u>IHC antigen retrieval protocols.</u></b> <b>For unpurified use at 1/100 - 1/250.</b>

ターゲット情報

機能	Inhibits NF-kappa-B by complexing with and trapping it in the cytoplasm. However, the unphosphorylated form resynthesized after cell stimulation is able to bind NF-kappa-B allowing its transport to the nucleus and protecting it to further NFKBIA-dependent inactivation. Association with inhibitor kappa B-interacting NKIRAS1 and NKIRAS2 prevent its phosphorylation rendering it more resistant to degradation, explaining its slower degradation.
組織特異性	Expressed in all tissues examined.
配列類似性	Belongs to the NF-kappa-B inhibitor family. Contains 6 ANK repeats.
翻訳後修飾	Phosphorylated by RPS6KA1; followed by degradation. Interaction with NKIRAS1 and NKIRAS2 probably prevents phosphorylation.
細胞内局在	Cytoplasm. Nucleus.

画像



Western blot - Anti-IKB beta antibody [EPR5037]  
(ab109509)

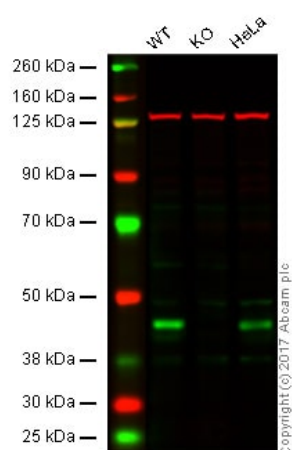
Anti-IKB beta antibody [EPR5037] (ab109509) at 1/1000 dilution  
(Purified) + HeLa (Human cervix adenocarcinoma epithelial cell)  
whole cell lysates at 15 µg

### Secondary

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

**Predicted band size:** 37 kDa

**Observed band size:** 48 kDa



Western blot - Anti-IKB beta antibody [EPR5037]  
(ab109509)

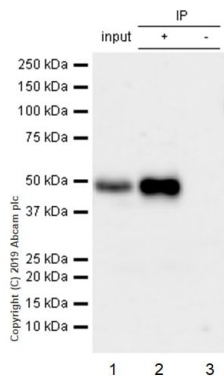
**Lane 1:** Wild type HAP1 whole cell lysate (20 µg)

**Lane 2:** IKB beta knockout HAP1 whole cell lysate (20 µg)

**Lane 3:** HeLa whole cell lysate (20 µg)

**Lanes 1 - 3:** Merged signal (red and green). Green -  
unpurified ab109509 observed at 45 kDa. Red - loading control,  
[ab18058](#), observed at 130 kDa.

ab109509 was shown to specifically react with IKB beta in wild type  
cells as signal was lost in IKB beta knockout cells. Wild-type and  
IKB beta knockout samples were subjected to SDS-PAGE.  
ab109509 and [ab18058](#) (Mouse anti-Vinculin loading control) were  
incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution  
respectively. Blots were developed 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 1/20000 dilution for 1 hour at room temperature  
before imaging.



Immunoprecipitation - Anti- $\text{IKB}$  beta antibody  
[EPR5037] (ab109509)

ab109509 (purified) at 1:20 dilution (1  $\mu\text{g}$ ) immunoprecipitating  $\text{IKB}$  beta in HeLa whole cell lysate.

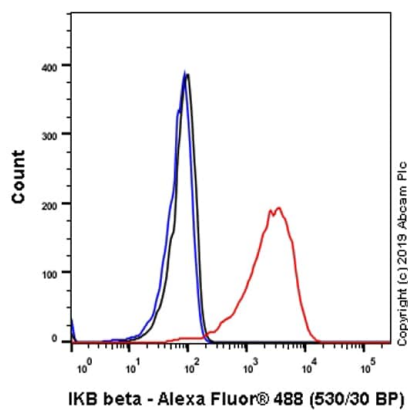
**Lane 1 (input):** HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10 $\mu\text{g}$

**Lane 2 (+):** ab109509 & HeLa whole cell lysate

**Lane 3 (-):** Rabbit monoclonal IgG ([ab172730](#)) instead of ab109509 in HeLa whole cell lysate

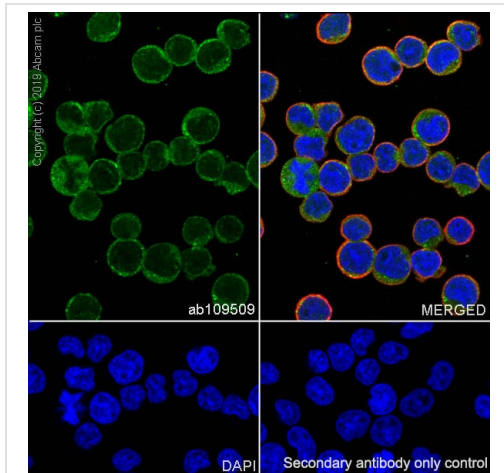
For western blotting, VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) was used at 1:1000 dilution.

**Blocking and diluting buffer:** 5% NFDM/TBST.



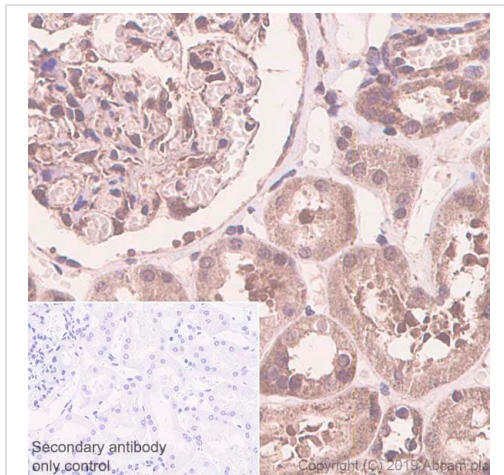
Flow Cytometry (Intracellular) - Anti- $\text{IKB}$  beta  
antibody [EPR5037] (ab109509)

Intracellular Flow Cytometry analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labeling  $\text{IKB}$  beta with purified ab109509 at 1/20 dilution (10  $\mu\text{g}/\text{ml}$ ) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488, [ab150077](#)) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



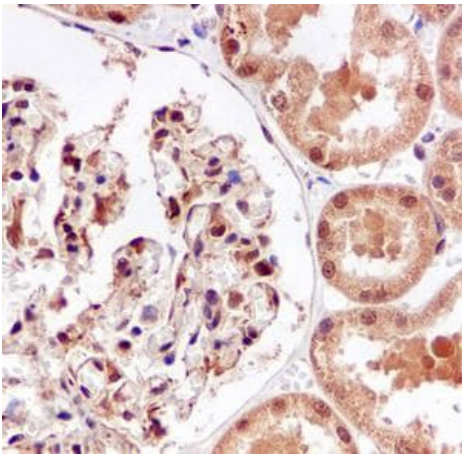
Immunocytochemistry/ Immunofluorescence - Anti-IKB beta antibody [EPR5037] (ab109509)

Immunocytochemistry/ Immunofluorescence analysis of Jurkat (Human T cell leukemia T lymphocyte) cells labeling IKB beta with purified ab109509 at 1:50 dilution (2.0 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with [ab195889](#) Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IKB beta antibody [EPR5037] (ab109509)

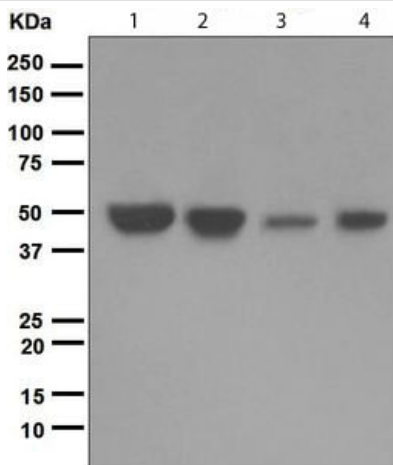
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human kidney tissue sections labeling IKB beta with purified ab109509 at 1:500 dilution (0.20 µg/ml). Heat mediated antigen retrieval was performed using [ab93684](#) (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti- $\text{IKB}$  beta antibody [EPR5037] (ab109509)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue using unpurified ab109509 at a dilution of 1/100.

Heat mediated antigen retrieval was performed with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti- $\text{IKB}$  beta antibody [EPR5037] (ab109509)

**All lanes :** Anti- $\text{IKB}$  beta antibody [EPR5037] (ab109509) at 1/1000 dilution (Unpurified)

**Lane 1 :** Jurkat cell lysate

**Lane 2 :** HeLa cell lysate

**Lane 3 :** THP-1 cell lysate

**Lane 4 :** MCF7 cell lysate

Lysates/proteins at 10  $\mu\text{g}$  per lane.

**Predicted band size:** 37 kDa

**Observed band size:** 48 kDa

### 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-IKB beta antibody [EPR5037] (ab109509)

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