

Anti-IKB alpha antibody [EP697] ab76429

敲除验证
重组
RabMAb

★★★★★
1 Abreviews
23 References
8 图像

概述

产品名称	Anti-IKB alpha抗体[EP697]
描述	兔单克隆抗体[EP697] to IKB alpha
宿主	Rabbit
经测试应用	适用于: WB, IHC-P, ICC/IF 不适用于: Flow Cyt
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide within Human IKB alpha (C terminal). The exact sequence is proprietary.
阳性对照	HeLa, PC-12, RAW264.7 and Jurkat cell lysates; human kidney and colon tissue.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EP697
同种型	IgG

应用

The Abpromise guarantee

Abpromise™ 承诺保证使用ab76429于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (1)	1/500 - 1/10000. Detects a band of approximately 36 kDa (predicted molecular weight: 36 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols . For unpurified use at 1/100 - 1/250.
ICC/IF		1/250. For unpurified use at 1/50 - 1/100.

应用说明

Is unsuitable for Flow Cyt.

靶标

功能

Inhibits the activity of dimeric NF-kappa-B/REL complexes by trapping REL dimers in the cytoplasm through masking of their nuclear localization signals. On cellular stimulation by immune and proinflammatory responses, becomes phosphorylated promoting ubiquitination and degradation, enabling the dimeric RELA to translocate to the nucleus and activate transcription.

疾病相关

Ectodermal dysplasia, anhidrotic, with T-cell immunodeficiency autosomal dominant

序列相似性

Belongs to the NF-kappa-B inhibitor family.
Contains 5 ANK repeats.

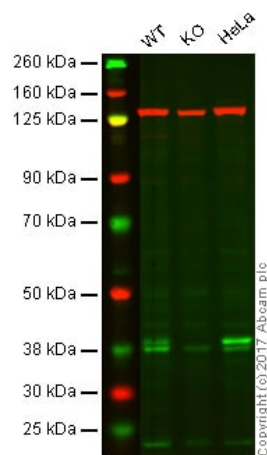
翻译后修饰

Phosphorylated; disables inhibition of NF-kappa-B DNA-binding activity. Phosphorylation at positions 32 and 36 is prerequisite to recognition by UBE2D3 leading to polyubiquitination and subsequent degradation.
Sumoylated; sumoylation requires the presence of the nuclear import signal. Sumoylation blocks ubiquitination and proteasome-mediated degradation of the protein thereby increasing the protein stability.
Monoubiquitinated at Lys-21 and/or Lys-22 by UBE2D3. Ubiquitin chain elongation is then performed by CDC34 in cooperation with the SCF(FBXW11) E3 ligase complex, building ubiquitin chains from the UBE2D3-primed NFKBIA-linked ubiquitin. The resulting polyubiquitination leads to protein degradation. Also ubiquitinated by SCF(BTRC) following stimulus-dependent phosphorylation at Ser-32 and Ser-36.
Deubiquitinated by porcine reproductive and respiratory syndrome virus Nsp2 protein, which thereby interferes with NFKBIA degradation and impairs subsequent NF-kappa-B activation.

细胞定位

Cytoplasm. Nucleus. Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export.

图片



Western blot - Anti-IKB alpha antibody [EP697]
(ab76429)

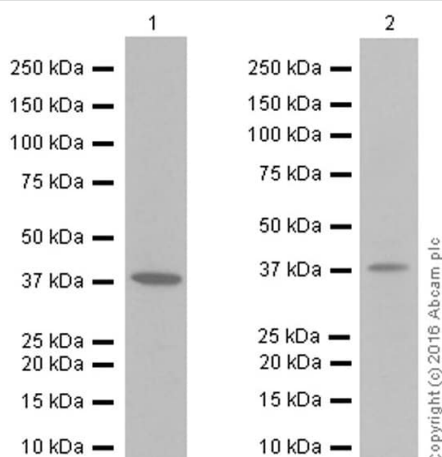
Lane 1: Wild-type HAP1 whole cell lysate (20 µg)

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

Lane 3: HeLa whole cell lysate (20 µg)

Lanes 1 - 3: Merged signal (red and green). Green - ab76429 observed at 39 kDa. Red - loading control, **ab18058**, observed at 130 kDa.

ab76429 was shown to specifically react with IKB alpha in wild-type HAP1 cells as well as additional cross-reactive bands. No bands were observed when IKB alpha knockout cells were examined. Wild-type and IKB alpha knockout samples were subjected to SDS-PAGE. Ab76429 and **ab18058** (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 1/500 dilution and 1/10,000 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 1/10,000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-IKB alpha antibody [EP697]
(ab76429)

All lanes : Anti-IKB alpha antibody [EP697] (ab76429) at 1/1000 dilution

Lane 1 : Jurkat (human acute T cell leukemia) whole cell lysate

Lane 2 : HeLa (human cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 15 µg per lane.

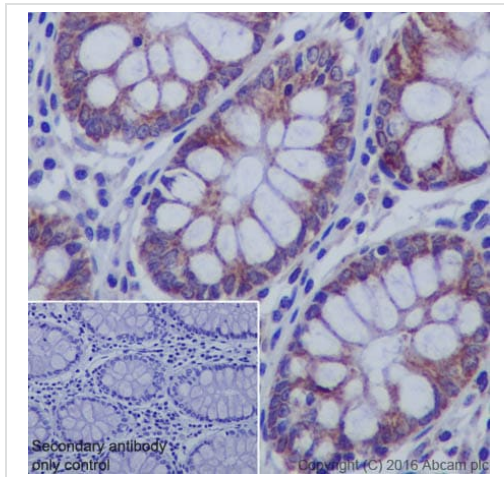
Secondary

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

Predicted band size: 36 kDa

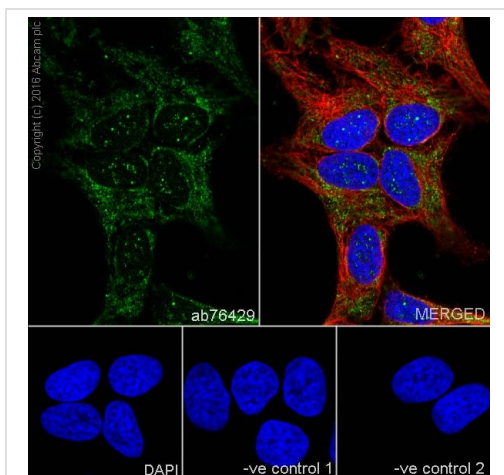
Observed band size: 39 kDa

Blocking/Diluting buffer 5% NFDM /TBST



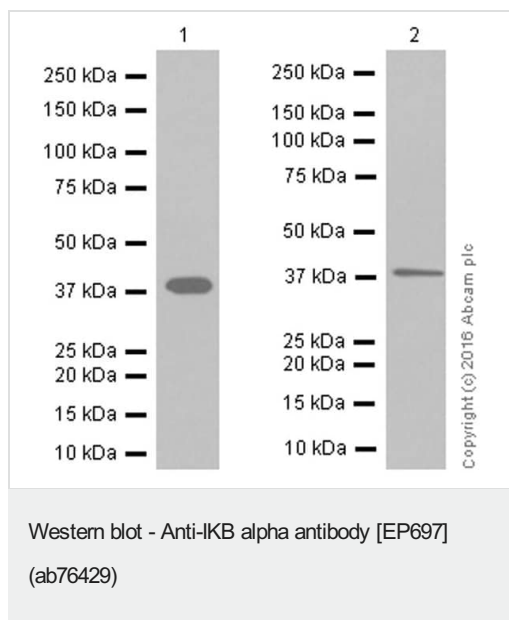
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IKB alpha antibody [EP697] (ab76429)

Immunohistochemical analysis of paraffin-embedded human colon tissue sections labelling IKB alpha with purified ab76429 at dilution of 1/500. Goat Anti-Rabbit IgG H&L (HRP) was used as the secondary antibody. The sample was counterstained with hematoxylin. Antigen retrieval was performed using EDTA Buffer; pH 9.0. PBS was used instead of the primary antibody as the negative control and is shown in the inset.



Immunocytochemistry/ Immunofluorescence - Anti-IKB alpha antibody [EP697] (ab76429)

Immunocytochemistry/Immunofluorescence staining of HeLa cells labelling IKB alpha with purified ab76429 at a working dilution of 1/250. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit (**ab150077**), used at a dilution of 1/1000. **ab7291**, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with **ab150120** (Alexa Fluor® 594 goat anti-mouse, 1/1000), shown in the top right hand panel. DAPI was used as nuclear counterstain. The cells were fixed in 4% Paraformaldehyde and permeabilized using 0.1% Triton X-100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, rabbit primary antibody was used followed by an Alexa Fluor® 594 goat anti-mouse antibody (**ab150120**). For negative control 2, **ab7291** (mouse anti-tubulin) was used followed by an Alexa Fluor® 488 goat anti-rabbit antibody (**ab150077**).



All lanes : Anti- IKB alpha antibody [EP697] (ab76429) at 1/10000 dilution

Lane 1 : RAW264.7 (mouse abelson murine leukemia virus-induced tumor) whole cell lysate

Lane 2 : PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate

Lysates/proteins at 15 μg per lane.

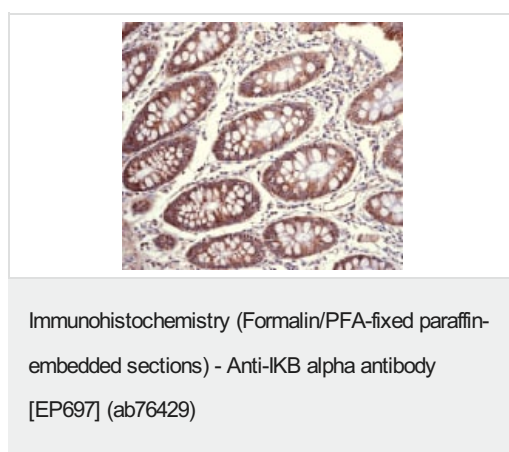
Secondary

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

Predicted band size: 36 kDa

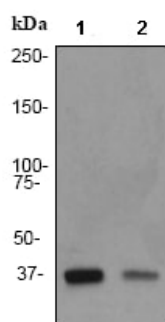
Observed band size: 39 kDa

Blocking/Diluting buffer 5% NFDM /TBST



Immunohistochemical analysis of Paraffin-embedded human colon tissue section labelling IKB alpha with ab76429 at 1/100 dilution.

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



Western blot - Anti-IKB alpha antibody [EP697] (ab76429)

All lanes : Anti-IKB alpha antibody [EP697] (ab76429) at 1/1000 dilution

Lane 1 : HeLa cell lysates

Lane 2 : Jurkat cell lysates

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : goat anti-rabbit HRP at 1/1000 dilution

Predicted band size: 36 kDa

Observed band size: 36 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 alpha antibody [EP697] (ab76429)

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.cn/abpromise> or contact our technical team.

Terms and conditions

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