

## Product datasheet

# Anti-IKB alpha antibody [6A920] ab12134

KO 評価済

★★★★☆ 14 Abreviews 1 References 画像数 3

### 製品の概要

製品名	Anti-IKB alpha antibody [6A920]
製品の詳細	Mouse monoclonal [6A920] to IKB alpha
由来種	Mouse
特異性	Ab12134 recognises IKB alpha.
アプリケーション	<b>適用あり:</b> IHC-P, WB
種交差性	<b>交差種:</b> Mouse, Rat, Hamster, Human, African green monkey
免疫原	6xHis-tagged fusion protein, corresponding to amino acids 105-291 of Human IKB alpha.
ポジティブ・コントロール	Jurkat + PMA (10 nm/ml) + ionomycin (1 µM) cell extract.

### 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 or -80°C. Avoid repeated freeze / thaw cycles.
バッファー	Preservative: 0.02% Sodium Azide Constituents: PBS
精製度	Immunogen affinity purified
特記事項(精製)	Affinity purified.
ポリ/モノ	モノクローナル
クローン名	6A920
アイソタイプ	IgG1

### アプリケーション

Our [Abpromise guarantee](#) covers the use of **ab12134** in the following tested applications.

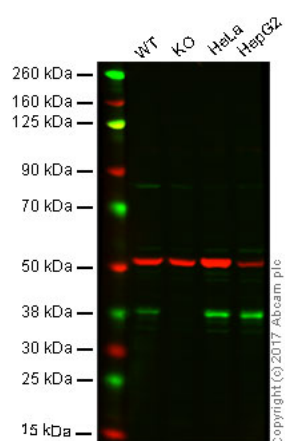
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
IHC-P	★★★★☆	Use at an assay dependent concentration.
WB	★★★★★	Use a concentration of 1 - 2 µg/ml. Detects a band of approximately 40 kDa (predicted molecular weight: 35.6 kDa).

## ターゲット情報

機能	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.
関連疾患	Ectodermal dysplasia, anhidrotic, with T-cell immunodeficiency autosomal dominant
配列類似性	Belongs to the NF-kappa-B inhibitor family. Contains 5 ANK repeats.
翻訳後修飾	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.
細胞内局在	Cytoplasm. Nucleus. Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export.

## 画像



Western blot - Anti-IKB alpha antibody [6A920]  
(ab12134)

**Lane 1:** Wild type HAP1 whole cell lysate (20  $\mu$ g)

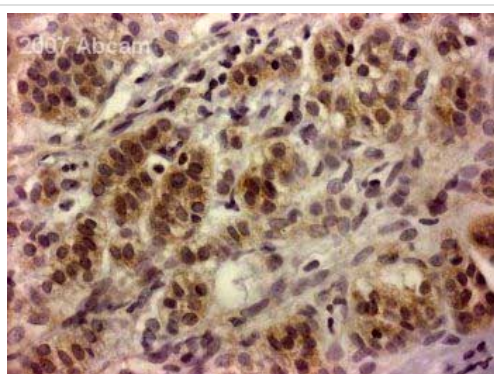
**Lane 2:** IKB alpha knockout HAP1 whole cell lysate (20  $\mu$ g)

**Lane 3:** HeLa whole cell lysate (20  $\mu$ g)

**Lane 4:** HepG2 whole cell lysate (20  $\mu$ g)

**Lanes 1 - 4:** Merged signal (red and green).  
Green - ab12134 observed at 38 kDa. Red - loading control, ab176560, observed at 50 kDa.

ab12134 was shown to specifically react with IKB alpha in wild type cells as signal was lost in IKB alpha knockout cells. Wild-type and IKB alpha knockout samples were subjected to SDS-PAGE. Ab12134 and ab176560 (Rabbit anti alpha Tubulin loading control) were incubated overnight at 4°C at 1  $\mu$ g/ml and 1/10000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed ab216772 and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed ab216777 secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-IKB alpha antibody [6A920] (ab12134)

This image is courtesy of an anonymous Abreview

ab12134 at 1/250 staining human adrenal tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was blocked in serum before incubation with the primary antibody for 30 minutes at 22°C. An HRP conjugated goat anti-mouse antibody was used as the secondary.



Western blot - Anti-IκB alpha antibody [6A920]  
(ab12134)

ab12134 detects both phosphorylated and non-phosphorylated forms of IκB alpha by Western blot. Jurkat cells (1E7) were treated for indicated time periods with 10 nm/ml PMA, 1 μM ionomycin and ab12134 (1/10000 dilution). 10 μl of cytoplasmic (C) and nuclear extract (N) were resolved on a 8.75% SDS-PAGE and transferred to Immobilon membrane.

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