

## Product datasheet

# Anti-IKB alpha (phospho Y42) antibody [EPR2353] ab92685

Recombinant RabMAb

[2 Images](#)

### Overview

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<b>Product name</b>	Anti-IKB alpha (phospho Y42) antibody [EPR2353]
<b>Description</b>	Rabbit monoclonal [EPR2353] to IKB alpha (phospho Y42)
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> WB <b>Unsuitable for:</b> Flow Cyt or IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	Lysate from A431 cells pre-treated with pervanadate.
<b>General notes</b>	<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<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>.</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>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
<b>Purity</b>	Tissue culture supernatant

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR2353
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab92685 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

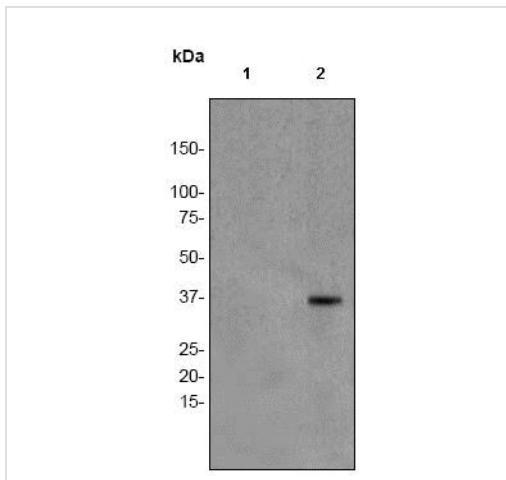
Application	Abreviews	Notes
WB		1/500 - 1/1000. Predicted molecular weight: 36 kDa.

**Application notes** Is unsuitable for Flow Cyt or IHC-P.

## Target

<b>Function</b>	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.
<b>Involvement in disease</b>	Ectodermal dysplasia, anhidrotic, with T-cell immunodeficiency autosomal dominant
<b>Sequence similarities</b>	Belongs to the NF-kappa-B inhibitor family. Contains 5 ANK repeats.
<b>Post-translational modifications</b>	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.
<b>Cellular localization</b>	Cytoplasm. Nucleus. Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export.

## Images



Western blot - Anti-IKB alpha (phospho Y42) antibody [EPR2353] (ab92685)

**All lanes :** Anti-IKB alpha (phospho Y42) antibody [EPR2353] (ab92685) at 1/500 dilution

**Lane 1 :** A-431 (Human epidermoid carcinoma cell line) whole cell lysate, untreated

**Lane 2 :** A-431 (Human epidermoid carcinoma cell line) whole cell lysate, pre-treated with pervanadate





Lysates/proteins at 10 µg per lane.

**Secondary**

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

**Predicted band size:** 36 kDa

Why choose a recombinant antibody?

 <b>Research with confidence</b> Consistent and reproducible results	 <b>Long-term and scalable supply</b> Recombinant technology
 <b>Success from the first experiment</b> Confirmed specificity	 <b>Ethical standards compliant</b> Animal-free production

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

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