

**Product Name: IκB-α (phospho Tyr42) Rabbit Polyclonal Antibody**  
**Catalog #: APRab04891**

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## Summary

<b>Production Name</b>	IκB-α (phospho Tyr42) Rabbit Polyclonal Antibody
<b>Description</b>	Rabbit Polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC-P,IF-P,IF-F,ICC/IF,ELISA
<b>Reactivity</b>	Human,Mouse,Rat

## Performance

<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phospho Antibody
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Storage</b>	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

## Immunogen

<b>Gene Name</b>	NFKBIA IKBA MAD3 NFKBI
<b>Alternative Names</b>	NFKBIA; IKBA; MAD3; NFKBI; NF-kappa-B inhibitor alpha; I-kappa-B-alpha; IκB-alpha; IkappaBalpha; Major histocompatibility complex enhancer-binding protein MAD3
<b>Gene ID</b>	4792.0
<b>SwissProt ID</b>	P25963.The antiserum was produced against synthesized peptide derived from human IkappaB-alpha around the phosphorylation site of Tyr42. AA range:9-58

## Application

<b>Dilution Ratio</b>	WB 1:500-1:2000, IHC-P 1:100-1:300, ELISA 1:10000, IF-P/IF-F/ICC/IF 1:50-200
<b>Molecular Weight</b>	about 40kDa

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## Background

This gene encodes a member of the NF-kappa-B inhibitor family, which contain multiple ankrin repeat domains. The encoded protein interacts with REL dimers to inhibit NF-kappa-B/REL complexes which are involved in inflammatory responses. The encoded protein moves between the cytoplasm and the nucleus via a nuclear localization signal and CRM1-mediated nuclear export. Mutations in this gene have been found in ectodermal dysplasia anhidrotic with T-cell immunodeficiency autosomal dominant disease. [provided by RefSeq, Aug 2011],disease:Defects in NFKBIA are the cause of ectodermal dysplasia anhidrotic with T-cell immunodeficiency autosomal dominant (ADEDAID) [MIM:612132]. Ectodermal dysplasia defines a heterogeneous group of disorders due to abnormal development of two or more ectodermal structures. ADEDAID is an ectodermal dysplasia associated with decreased production of pro-inflammatory cytokines and certain interferons, rendering patients susceptible to infection.,function: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.,induction:Induced in adherent monocytes.,online information:NFKBIA mutation db,PTM:Phosphorylated; disables inhibition of NF-kappa-B DNA-binding activity.,PTM:Sumoylated; sumoylation requires the presence of the nuclear import signal.,PTM:Ubiquitinated; subsequent to stimulus-dependent phosphorylation on serines.,similarity:Belongs to the NF-kappa-B inhibitor family.,similarity:Contains 5 ANK repeats.,subcellular location:Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export.,subunit:Interacts with RELA; the interaction requires the nuclear import signal. Interacts with NKIRAS1 and NKIRAS2. Part of a 70-90 kDa complex at least consisting of CHUK, IKBKB, NFKBIA, RELA, IKBKAP and MAP3K14. Interacts with HBV protein X. Interacts with RWDD3; the interaction enhances sumoylation.,

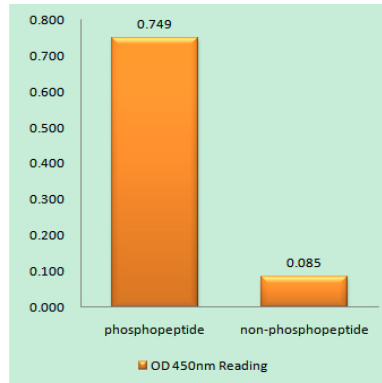
## Research Area

Chemokine;Apoptosis\_Inhibition;Apoptosis\_Mitochondrial;Apoptosis\_Overview;Toll\_Like;NOD-like receptor;RIG-I-like receptor;Cytosolic DNA-sensing pathway;T\_Cell\_Receptor;B\_Cell\_Antigen;Neurotrophin;Adipocytokine;Epithelial cell signaling in Helicobacter pylori infection;Pathways in cancer;Prostate cancer;Chronic myeloid leukemia;Small cell lung cancer;

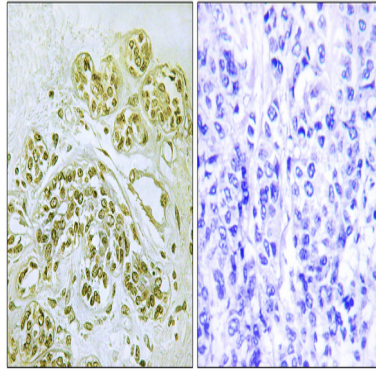
## Image Data

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Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using I $\kappa$ B- $\alpha$  (Phospho-Tyr42) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using I $\kappa$ B- $\alpha$  (Phospho-Tyr42) Antibody. The picture on the right is blocked with the phospho peptide.

## Note

For research use only.