



Product Specification Sheet

NF-kappa-B inhibitor alpha antibody

Cat # NFKBIA-A Rabbit Anti-Human NF-kappa-B inhibitor alpha antibody **SIZE:** 100 µg
Cat # NFKBIA-C Recombinant Human NF-kappa-B inhibitor alpha protein for Western blotting **SIZE:** 100 µl

NF-kappa-B inhibitor alpha (NFkB α , also known as I κ B α) is one of seven members of the I κ B class of inhibitor proteins that have been identified to date. NFkB α inhibits the NFkB complex in unstimulated cells through non-covalent binding. Following stimulation of cells, NFkB α is phosphorylated so that it dissociates from the NFkB and then ubiquitinated prior to degradation. Phosphorylation of I κ B by IKK α is stimulated by the NFkB inducing kinase (NIK), which itself is a central regulator for NFkB activation in response to TNF and IL-1. The functional IKK complex contains three subunits, IKK α , IKK β and IKK γ , and each appear to make essential contributions to I κ B phosphorylation. I κ B- α is a 40 kDa protein that functions to inhibit NF- κ B activity.

Source of Antigen and Antibodies

Uniprot: P25963

Host: Rabbit

Clonality: Polyclonal

Immunogen: Full length recombinant Human NF-kappa-B inhibitor alpha

Purification: Ammonium sulfate followed by protein affinity purification

Species Reactivity: Human

Cross reactivity: I κ B- α is highly conserved across species. Reactivity is expected for species containing >80% or more homology with Human I κ B- α .

Alternative names: I κ B- α , Major histocompatibility complex enhancer-binding protein MAD3

Subcellular Location: Nucleus and Cytoplasm

Recommended Secondary Antibody: Goat anti-Rabbit IgG-HRP (ADI cat#20320)

Negative Control: Non-immune Rabbit IgG (ADI cat# 2009-1)

NFKBIB-C: Contains a recombinant *E.coli* expressed full length human I κ B α protein at a concentration of 1 ng/µl in Laemmli buffer (62.5 mM Tris-HCL, pH 6.8, 2% SDS, 10% glycerol, 5% BME, and 0.002% bromphenol blue). Heat for 5 minutes at 95°C then load 1-5 µl. Store at -20°C in suitable size aliquots, do not expose to multiple free/thaw cycles. **Note:** Due to the addition of tags, the protein appears slightly larger than native protein.

Form & Storage of Antibodies

Affinity pure IgG Solution

Concentration: 0.5 mg/ml Volume: 200 µl
Supplied in PBS, pH 7.4 + 0.1% BSA
The antibody can be made available carrier free or conjugated to HRP, Biotin, or FITC on request

Lyophilized powder

Lyophilized from a formulation containing PBS, pH 7.4 +3% Trehalose. Reconstitute in 200 µl PBS, 0.05% tween-20, 0.1% BSA, and a preservative to 0.5 mg/ml.

Storage:

Short-term: 4°C for 1 month

Long-term: at -20°C or below in suitable aliquots after reconstitution for 1 year. Do not expose to multiple free/thaw cycles or store working, diluted solutions. Glycerol may be added to a final concentration of 50% and antibodies can be stored un-aliquoted at -20°C.

Recommended Usage

ELISA: Assay dependent concentration. Typically, between 0.1-2.0 µg/ml for capture/detection antibodies. Request the carrier free or conjugated antibody.

Western Blotting: 0.5-1.0 µg/ml
Observed band size: 39 kDa

IHC-P: 1-10 µg/ml.

The above concentrations are a *suggestion*, user's must optimize their assay based on their own conditions. The antibody may work in other applications such as Immunocytochemistry or IP. These methods have not been tested by ADI.

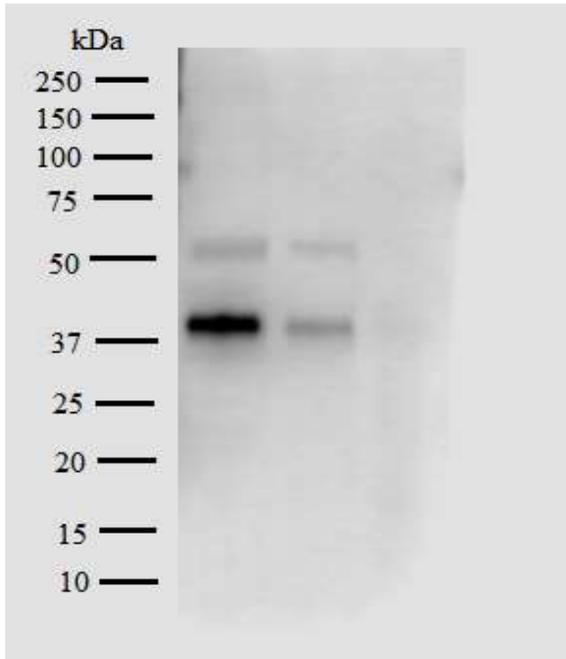
**This product is for In vitro research use only.*

Related materials available from ADI

| Catalog# | Description |
|----------|--|
| BCL11-A | Rabbit Anti-Human BCL-2 antibody |
| BCL21-A | Rabbit Anti-Mouse BCL-2 antibody |
| BCL2-C | Recombinant BCL-2 control for Western blotting |
| HP5311-A | Rabbit anti-Human P53 antibody |
| HP5311-C | Recombinant Human P53 protein control for Western blotting |
| CASP3-A | Rabbit anti-Mouse Capase 3 antibody |

NFKBIA-A

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Western blotting: 5, 1, and 0.2 ng of recombinant I κ B α (**NFKBIA-C**) was heated for 5 minutes at 95°C then electrophoretically separated on a 4-20% SDS-PAGE gel. The gel was run at 100V for ~1 hour and 30 minutes then transferred to a 0.2 μ m nitrocellulose membrane using the 'Mixed MW' settings on a Transblot Turbo (Biorad). The blot was blocked for 1 hour at room temperature with 1% Casein. **NFKBIA-A** was diluted with TBST+0.1% BSA to 1 μ g/ml and incubated overnight at 4°C. The blot was washed with TBS-T 3 times for 5 minutes each. Goat anti-rabbit IgG HRP (**ADI cat#20320**) was diluted in TBST+0.1% BSA at a 1:1,000 dilution (500 ng/ml) then incubated for 1 hour at room temperature. The blot was washed 3 times with TBS-T for 5 minutes each. The blot was then incubated with regular ECL substrate for 1 minute and imaged on a CCD imaging system (C-DiGit, LI-COR).