

## **IkBalpha Antibody**

Rabbit Polyclonal Antibody Catalog # ABV10197

## **Specification**

## **IkBalpha Antibody - Product Information**

Application WB
Primary Accession Q9Z1E3
Reactivity Mouse
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 35071

## **IkBalpha Antibody - Additional Information**

**Gene ID 18035** 

Application & Usage Western blot (0.5-4 μg/ml). However, the

optimal conditions should be determined individually. Cross-reactivity to IkB-alpha of other species has not been determined.

#### **Other Names**

NFKBIA, IKBA, MAD3, MAD-3, IkappaBalpha, I-kappa-B-alpha, # NFKBI, IkB-alpha, NF-kappa-B inhibitor alpha; I-kappa-B-alpha; IkappaBalpha; IkB-alpha

#### **Target/Specificity**

IkBalpha

## **Antibody Form**

Liquid

# **Appearance**

Colorless liquid

### **Formulation**

 $100 \mu g$  (0.2 mg/ml) affinity-purified rabbit anti-lkB-alpha polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 50% glycerol, 1% BSA, and 0.02% thimerosal.

#### Handling

The antibody solution should be gently mixed before use.

## **Reconstitution & Storage**

-20 °C

### **Background Descriptions**

#### **Precautions**



IkBalpha Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# **IkBalpha Antibody - Protein Information**

Name Nfkbia

Synonyms Ikba

#### **Function**

Inhibits the activity of dimeric NF-kappa-B/REL complexes by trapping REL (RELA/p65 and NFKB1/p50) dimers in the cytoplasm by masking their nuclear localization signals (PubMed:<a href="http://www.uniprot.org/citations/10097128" target="\_blank">10097128</a>, PubMed:<a href="http://www.uniprot.org/citations/9990853" target="\_blank">9990853</a>). On cellular stimulation by immune and pro-inflammatory responses, becomes phosphorylated promoting ubiquitination and degradation, enabling the dimeric RELA to translocate to the nucleus and activate transcription (PubMed:<a href="http://www.uniprot.org/citations/7878466" target="\_blank">7878466</a>, PubMed:<a href="http://www.uniprot.org/citations/10097128" target="\_blank">10097128</a>, PubMed:<a href="http://www.uniprot.org/citations/9990853" target="\_blank">9990853</a>).

#### **Cellular Location**

Cytoplasm {ECO:0000250|UniProtKB:P25963}. Nucleus {ECO:0000250|UniProtKB:P25963}. Note=Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1- dependent nuclear export. {ECO:0000250|UniProtKB:P25963}

#### **Tissue Location**

Highly expressed in lymph node, thymus followed by liver, brain, muscle, kidney, gastrointestinal and reproductive tract

## **IkBalpha Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **IkBalpha Antibody - Images**

# IkBalpha Antibody - Background

IkB-alpha protein is a NF-kB inhibitory protein. It binds NF-kB and retains the complex in the cytoplasm, thereby preventing it from entering into nucleus and functioning as a transcription factor. Upon receiving a variety of signals, IkB-alpha undergoes phosphorylation at serine residues by an ubiquitin-dependent protein kinases and finally degraded by the proteasome. Free NF-kB then binds DNA and affects gene expression.