

### Anti-IKB alpha Antibody

Rabbit polyclonal antibody to IKB alpha Catalog # AP59636

### Specification

# Anti-IKB alpha Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Calculated MW WB, IF/IC, IHC <u>P25963</u> <u>O9Z1E3</u> Human, Mouse, Rat, Pig, Bovine, SARS Rabbit Polyclonal 35609

## Anti-IKB alpha Antibody - Additional Information

Gene ID 4792

**Other Names** IKBA; MAD3; NFKBI; NF-kappa-B inhibitor alpha; I-kappa-B-alpha; IkB-alpha; IkappaBalpha; Major histocompatibility complex enhancer-binding protein MAD3

Target/Specificity Recognizes endogenous levels of IKB alpha protein.

Dilution WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200), IF/IC (1/100 - 1/500) IF/IC~~N/A IHC~~1:100~500

**Format** Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

#### Anti-IKB alpha Antibody - Protein Information

Name NFKBIA

Synonyms IKBA, MAD3, NFKBI

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/1493333" target="\_blank">1493333</a>, PubMed:<a href="http://www.uniprot.org/citations/36651806" target="\_blank">36651806</a>, PubMed:<a



href="http://www.uniprot.org/citations/7479976" target="\_blank">7479976</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/7479976" target="\_blank">7479976</a>, PubMed:<a href="http://www.uniprot.org/citations/7628694" target="\_blank">7628694</a>, PubMed:<a href="http://www.uniprot.org/citations/7628694" target="\_blank">7796813</a>, PubMed:<a href="http://www.uniprot.org/citations/7796813" target="\_blank">7796813</a>, PubMed:<a href="http://www.uniprot.org/citations/7878466" target="\_blank">7878466</a>).

#### **Cellular Location**

Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export.

## Anti-IKB alpha Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## Anti-IKB alpha Antibody - Images



Western blot analysis of IKB alpha expression in rat kidney (A), rat muscle (B) whole cell lysates.





Immunohistochemical analysis of IKB alpha staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of IKB alpha staining in HepG2 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 594-conjugated secondary antibody (red) in PBS at room temperature in the dark.

#### Anti-IKB alpha Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the N-term region of human IKB alpha. The exact sequence is proprietary.