

# IκB-α (Phospho-Tyr305) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP52429

#### **Product Information**

**Application** WB, IHC **Primary Accession** P25963

**Reactivity** Human, Mouse, Rat

Host Rabbit
Clonality Polyclonal
Calculated MW 35609

#### **Additional Information**

**Gene ID** 4792

Other Names NF-kappa-B inhibitor alpha, I-kappa-B-alpha, IkB-alpha, IkappaBalpha, Major

histocompatibility complex enhancer-binding protein MAD3, NFKBIA, IKBA,

MAD3, NFKBI

**Dilution** WB~~1:1000 IHC~~1:50~100

Format Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4,

150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.

Storage Conditions -20°C

#### **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: 1493333, PubMed: 36651806, PubMed: 7479976).

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:7479976, PubMed:7628694, PubMed:798813, PubMed:7878466).

**Cellular Location** Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm

by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export.

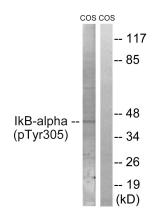
## **Background**

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.

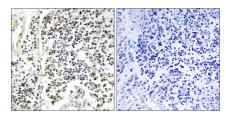
#### References

Haskill S., et al. Cell 65:1281-1289(1991). Jungnickel B., et al. J. Exp. Med. 191:395-402(2000). Liu B., et al. Submitted (APR-2001) to the EMBL/GenBank/DDBJ databases. Kalnine N., et al. Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004).

### **Images**



Western blot analysis of extracts from COS7 cells, treated with nocodazole (1ug/ml, 16hours), using I $\kappa$ B- $\alpha$  (Phospho-Tyr305) antibody.



Immunohistochemistry analysis of paraffin-embedded human lymph node tissue using IkB- $\alpha$  (Phospho-Tyr305) antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.