

**IκB-α (Phospho-Tyr305) Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP52429****Specification****IκB-α (Phospho-Tyr305) Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">P25963</a>
Reactivity	<b>Human, Mouse, Rat</b>
Host	<b>Rabbit</b>
Clonality	<b>Polyclonal</b>
Calculated MW	<b>35609</b>

**IκB-α (Phospho-Tyr305) Antibody - Additional Information****Gene ID** 4792**Other Names**

NF-kappa-B inhibitor alpha, I-kappa-B-alpha, IκB-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 Mg<sup>2+</sup> and Ca<sup>2+</sup>), pH 7.4, 150mM NaCl, 0.09% (W/V) sodium azide and 50% glycerol.**Storage Conditions**

-20°C

**IκB-α (Phospho-Tyr305) 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>).

target="\_blank">7628694</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

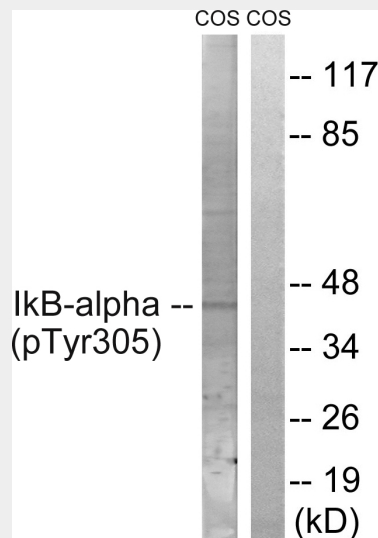
Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export.

### I $\kappa$ B- $\alpha$ (Phospho-Tyr305) Antibody - Protocols

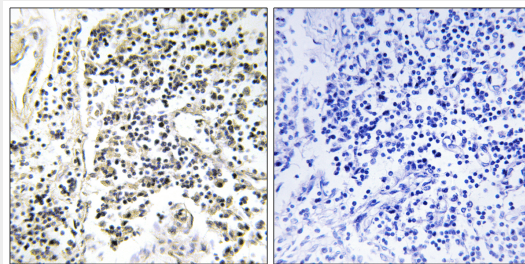
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### I $\kappa$ B- $\alpha$ (Phospho-Tyr305) Antibody - Images



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



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

### **I $\kappa$ B- $\alpha$ (Phospho-Tyr305) Antibody - 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.

### **I $\kappa$ B- $\alpha$ (Phospho-Tyr305) Antibody - 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.  
Kalnina N., et al. Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.  
Ota T., et al. Nat. Genet. 36:40-45(2004).