

## Datasheet

### NFKBIA (phospho Y305) polyclonal antibody

**Catalog Number:** PAB7919

**Regulation Status:** For research use only (RUO)

**Product Description:** Rabbit polyclonal antibody raised against synthetic phosphopeptide of NFKBIA.

**Immunogen:** Synthetic phosphopeptide (conjugated with KLH) corresponding to residues surrounding Y305 of human NFKBIA.

**Host:** Rabbit

**Reactivity:** Human, Mouse, Rat

**Applications:** ELISA, WB-Ce  
(See our web site product page for detailed applications information)

**Protocols:** See our web site at  
<http://www.abnova.com/support/protocols.asp> or product page for detailed protocols

**Specificity:** This peptide sequence has low homology to other IκB proteins.

**Form:** Liquid

**Recommend Usage:** ELISA (1:2000)  
Western Blot (1:500)  
The optimal working dilution should be determined by the end user.

**Storage Buffer:** In PBS (50% glycerol, 1 mg/mL BSA, 0.05% sodium azide)

**Storage Instruction:** Store at -20°C.  
Aliquot to avoid repeated freezing and thawing.

**Entrez GeneID:** 4792

**Gene Symbol:** NFKBIA

**Gene Alias:** IKBA, MAD-3, NFKBI

**Gene Summary:** NFKB1 (MIM 164011) or NFKB2 (MIM 164012) is bound to REL (MIM 164910), RELA (MIM

164014), or RELB (MIM 604758) to form the NFKB complex. The NFKB complex is inhibited by I-kappa-B proteins (NFKBIA or NFKBIB, MIM 604495), which inactivate NF-kappa-B by trapping it in the cytoplasm. Phosphorylation of serine residues on the I-kappa-B proteins by kinases (IKBKA, MIM 600664, or IKBKB, MIM 603258) marks them for destruction via the ubiquitination pathway, thereby allowing activation of the NF-kappa-B complex. Activated NFKB complex translocates into the nucleus and binds DNA at kappa-B-binding motifs such as 5-prime GGGRNNYYCC 3-prime or 5-prime HGGARNYYCC 3-prime (where H is A, C, or T; R is an A or G purine; and Y is a C or T pyrimidine).[supplied by OMIM]

#### References:

1. Hepatitis C virus NS5A and subgenomic replicon activate NF-kappaB via tyrosine phosphorylation of IkappaBalpha and its degradation by calpain protease. Waris G, Livolsi A, Imbert V, Peyron JF, Siddiqui A. J Biol Chem. 2003 Oct 17;278(42):40778-87. Epub 2003 Aug 7.
2. Activation of nuclear factor kappaB and Bcl-x survival gene expression by nerve growth factor requires tyrosine phosphorylation of IkappaBalpha. Bui NT, Livolsi A, Peyron JF, Prehn JH. J Cell Biol. 2001 Feb 19;152(4):753-64.
3. Inducible phosphorylation of I kappa B alpha is not sufficient for its dissociation from NF-kappa B and is inhibited by protease inhibitors. Finco TS, Beg AA, Baldwin AS Jr. Proc Natl Acad Sci U S A. 1994 Dec 6;91(25):11884-8.