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Phospho-NFKBIA(Ser32)) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3714a

Product Information

Application	DB, E
Primary Accession	P25963
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB25830
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
Target/Specificity	This NFKBIA Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Ser32 of human NFKBIA.
Dilution	DB~~1:500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Phospho-NFKBIA(Ser32)) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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:7796813, 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.

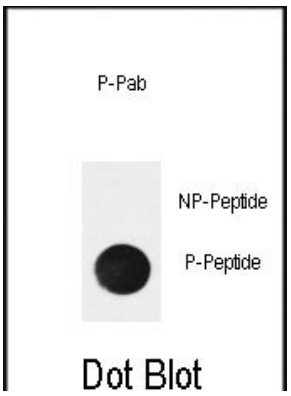
Background

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.

References

Wu, S., et al. J. Clin. Endocrinol. Metab. 95(3):1220-1228(2010)
Senol Tuncay, S., et al. Biochem. Genet. 48 (1-2), 104-112 (2010)
Hung, Y.H., et al. Dis. Markers 28(1):55-62(2010)
McGeachie, M., et al. Circulation 120(24):2448-2454(2009)

Images



Dot blot analysis of anti-Phospho-NFKBIA (Ser32) Antibody Phospho-specific Pab (Cat. #AP3714a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Citations

- A20 inhibits the release of inflammatory cytokines by suppressing the activation of the nuclear factor-kappa B pathway in osteoarthritic fibroblast-like synoviocytes.

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