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**Product Name: NFκB-p105 (phospho Ser907) Rabbit Polyclonal Antibody****Catalog #: APRab05094**

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF,ELISA,IP
<b>Reactivity</b>	Human,Rat,Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Phosphorylated
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

<b>Dilution Ratio</b>	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:10000-1:20000,IP 1:20-1:50
<b>Molecular Weight</b>	110kDa

**Antigen Information**

<b>Gene Name</b>	NFKB1
<b>Alternative Names</b>	NFKB1; Nuclear factor NF-kappa-B p105 subunit; DNA-binding factor KBF1; EBP-1; Nuclear factor of kappa light polypeptide gene enhancer in B-cells 1
<b>Gene ID</b>	4790.0
<b>SwissProt ID</b>	P19838
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human NF-kappaB p105/p50 around the phosphorylation site of Ser907. AA range:874-923

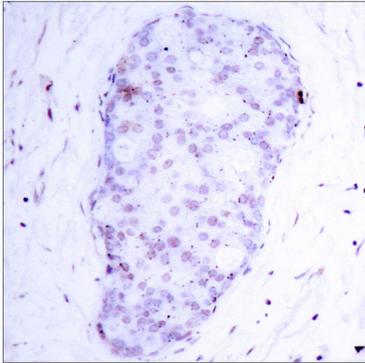
**Background**

nuclear factor kappa B subunit 1(NFKB1) Homo sapiens This gene encodes a 105 kD protein which can undergo cotranslational processing by the 26S proteasome to produce a 50 kD protein. The 105 kD protein is a Rel protein-specific transcription inhibitor and the 50 kD protein is a DNA binding subunit of the NF-kappa-B (NFKB) protein complex. NFKB is a transcription regulator that is activated by various intra- and extra-cellular stimuli such as cytokines, oxidant-free radicals, ultraviolet irradiation, and bacterial or viral products. Activated NFKB translocates into the nucleus and stimulates the expression of genes involved in a wide variety of biological functions. Inappropriate activation of NFKB has been associated with a number of inflammatory diseases while persistent inhibition of NFKB leads to inappropriate immune cell development or delayed cell growth. Alternative splicing results in multiple transcript variants encoding different isoforms: Glycine-rich region (GRR) appears to be a critical element in the generation of p50, domain: The C-terminus of p105 might be involved in cytoplasmic retention, inhibition of DNA-binding, and transcription activation., function: NF-kappa-B is a pleiotropic transcription factor which is present in almost all cell types and is involved in many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NF-kappa-B is a homo- or heterodimeric complex formed by the Rel-like domain-containing proteins RELA/p65, RELB, NFKB1/p105, NFKB1/p50, REL and NFKB2/p52 and the heterodimeric p65-p50 complex appears to be most abundant one. The dimers bind at kappa-B sites in the DNA of their target genes and the individual dimers have distinct preferences for different kappa-B sites that they can bind with distinguishable affinity and specificity. Different dimer combinations act as transcriptional activators or repressors, respectively. NF-kappa-B is controlled by various mechanisms of post-translational modification and subcellular compartmentalization as well as by interactions with other cofactors or corepressors. NF-kappa-B complexes are held in the cytoplasm in an inactive state complexed with members of the NF-kappa-B inhibitor (I-kappa-B) family. In a conventional activation pathway, I-kappa-B is phosphorylated by I-kappa-B kinases (IKKs) in response to different activators, subsequently degraded thus liberating the active NF-kappa-B complex which translocates to the nucleus. NF-kappa-B heterodimeric p65-p50 and RelB-p50 complexes are transcriptional activators. The NF-kappa-B p50-p50 homodimer is a transcriptional repressor, but can act as a transcriptional activator when associated with BCL3. NFKB1 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p105 and generation of p50 by a cotranslational processing.

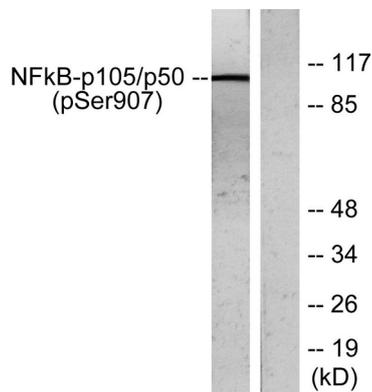
## Research Area

T\_Cell\_Receptor; B\_Cell\_Antigen; Stem\_cell\_pathway; Toll\_Like; MAPK\_ERK\_Growth; MAPK\_G\_Protein; PI3K/Akt; Protein\_Acetylation

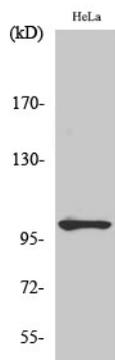
## Image Data



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using NF-kappaB p105/p50 (Phospho-Ser907) Antibody.



Western blot analysis of lysates from HeLa cells treated with TNF-alpha, using NF-kappaB p105/p50 (Phospho-Ser907) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of various cells using Phospho-NFκB-p105 (S907) Polyclonal Antibody diluted at 1: 2000