

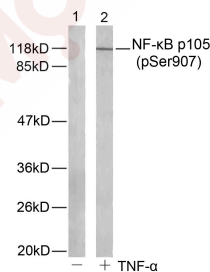
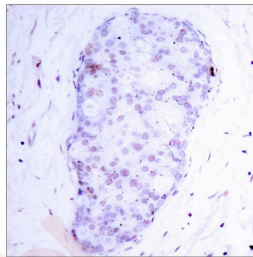
## Anti-Phospho-NFKB1 (Ser907) Polyclonal Antibody

### Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat
Conjugation:	Unconjugated
Purification:	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.

### Applications

Verified Activity:	<ol style="list-style-type: none"><li>1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using NF-<math>\kappa</math>B p105(phospho-Ser907) antibody (TMAC-02828).</li><li>2. Western blot analysis of extract from HeLa cells untreated or treated with TNF-<math>\alpha</math> using NF-<math>\kappa</math>B p105(phospho-Ser907) antibody (TMAC-02828).</li></ol>
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Application:	IHC,WB
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### Properties

Stability & Storage:	Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.
Shipping:	Shipping with blue ice.

### Antigen Details

Immunogen:	Peptide sequence around phosphorylation site of serine 907(P-L-S(p)-P-A) derived from Human NFkB-p105
Antigen Species:	Human
Uniprot ID:	P19838
Synonyms:	NFKB1 (p-Ser907);p-NFKB1 (Ser907);p-NFKB1 (S907);NFKB1 (p-S907)

### Research Background

NF-kappa-B is a pleiotropic transcription factor present in almost all cell types and is the endpoint of a series of signal transduction events that are initiated by a vast array of stimuli related to 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. The proteasome-mediated process ensures the production of both p50 and p105 and preserves their independent function, although processing of NFKB1/p105 also appears to occur post-translationally. p50 binds to the kappa-B consensus sequence 5'-GGRNNYYCC-3', located in the enhancer region of genes involved in immune response and acute phase reactions. In a complex with MAP3K8, NFKB1/p105 represses MAP3K8-induced MAPK signaling; active MAP3K8 is released by proteasome-dependent degradation of NFKB1/p105.

Beg A.A., Baldwin A.S. Jr. *Oncogene* 9:1487-1492(1994)

Guizani-Tabbane L., Ben-Aissa K., Belghith M., Sassi A., Dellagi K. *Infect. Immun.* 72:2582-2589(2004)

Beinke S., Robinson M.J., Hugunin M., Ley S.C. *Mol. Cell. Biol.* 24:9658-9667(2004)

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