

NFκB-p105/p50(Phospho-Ser907) Antibody

Catalog No: #11019



Package Size: #11019-1 50ul #11019-2 100ul

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Description

Product Name	NFκB-p105/p50(Phospho-Ser907) Antibody
Host Species	Rabbit
Clonality	Polyclonal
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	WB IHC
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of NFκB1-p105 only when phosphorylated at serine 907.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of serine 907(P-L-S(p)-P-A) derived from Human NFκB-p105.
Target Name	NFκB-p105
Modification	Phospho
Other Names	p50; KBF1; NF-κB1; NFκB-p50; NFκappaB
Accession No.	Swiss-Prot: P19838NCBI Gene ID: 4790NCBI mRNA: NM_001165412.1 NCBI Protein: NP_001158884.1
Uniprot	P19838
GeneID	4790;
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C

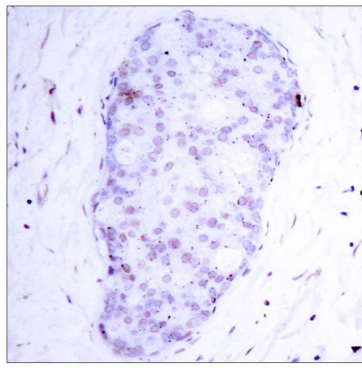
Application Details

Predicted MW: 120kd

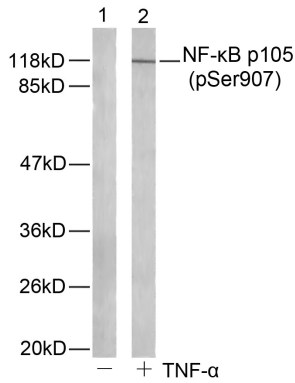
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

Images



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using NF-κB p105(phospho-Ser907) antibody (#11019).



Western blot analysis of extract from HeLa cells untreated or treated with TNF-α using NF-κB p105(phospho-Ser907) antibody (#11019).

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)

Note: This product is for in vitro research use only