

## NFkB-p65(Phospho-Thr254) Antibody

Catalog No: #11010

Package Size: #11010-1 50ul #11010-2 100ul

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## Description

Product Name	NFkB-p65(Phospho-Thr254) 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,IF,ELISA
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous level of NF-kB p65 only when phosphorylated at threonine 254.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of threonine 254 (F-R-T(p)-P-P) derived from Human NFkB-p65.
Conjugates	Unconjugated
Target Name	NFkB-p65
Modification	Phospho
Other Names	NFKB3; RELA; TF65; Transcription factor p65; p65
Accession No.	Swiss-Prot: Q04206NCBI Protein: NP_001138610.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

## Application Details

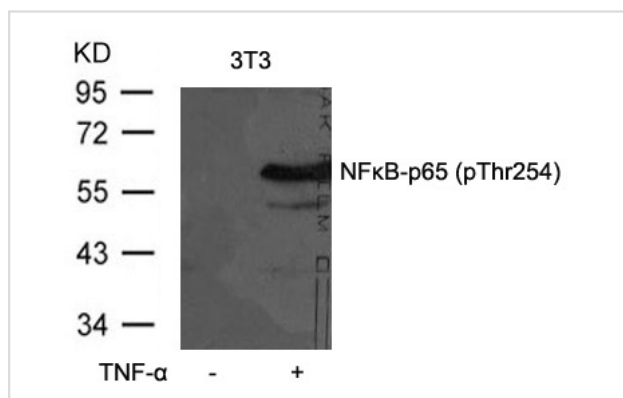
Predicted MW: 65kd

Western blotting: 1:500~1:1000

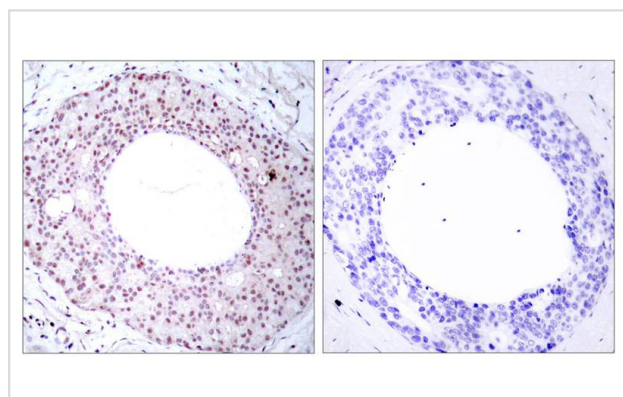
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

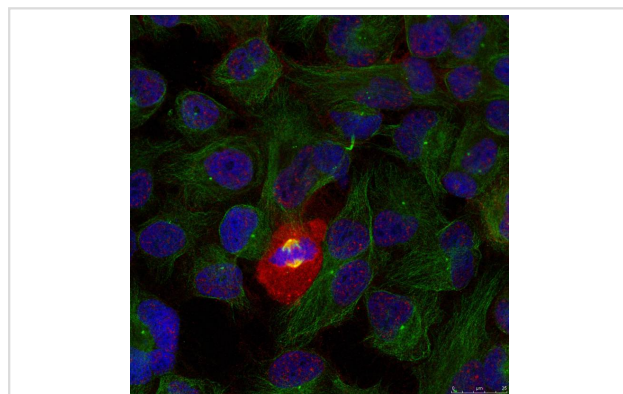
## Images



Western blot analysis of extracts from 3T3 cells untreated or treated with TNF- $\alpha$  using NF $\kappa$ B-p65(Phospho-Thr254) Antibody #11010.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using NF $\kappa$ B-p65(Phospho-Thr254) Antibody #11010(left) or the same antibody preincubated with blocking peptide(right).



Immunofluorescence staining of methanol-fixed HeLa using NF $\kappa$ B-p65(Phospho-Thr254) Antibody #11010.

## Background

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, NF $\kappa$ B1/p105, NF $\kappa$ B1/p50, REL and NF $\kappa$ B2/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 p65-c-Rel complexes are transcriptional activators. The NF- $\kappa$ B p65-p65 complex appears to be involved in invasion-mediated activation of IL-8 expression. The inhibitory effect of I- $\kappa$ B upon NF- $\kappa$ B in the cytoplasm is exerted primarily through the interaction with p65. p65 shows a weak DNA-binding site which could contribute directly to DNA binding in the NF- $\kappa$ B complex.

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Ryo A, et al. (2003) Mol Cell. 12 (6): 1413-1426.

Baeuerle P A, et al. (1994) Annu Rev Immunol. 12:141-179.

Baeuerle P A, et al. (1996) Cell 87:13-20.

Haskill S, et al. (1991) Cell 65:1281-1289.

## Published Papers

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el at., The Terminalia chebula retz extract treats hyperuricemic nephropathy by inhibiting TLR4/myd88/NF-kb axis In J Ethnopharmacol On 2023 Dec 28 by Hao Liu 1, Zhiyu Chen et al..PMID: 38159820, , (2023)

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Ang Li;Peng Liu;Jiaohong Gan;Weijun Fang;Anjie Liu et al., Phellodendrine Exerts Protective Effects on Intra-abdominal Sepsis by Inactivating AKT/NF-κB Signaling., , (2025)

[PMID:39953352](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.