

## NFkB-p65(Phospho-Thr505) Antibody

Catalog No: #11166

Package Size: #11166-1 50ul #11166-2 100ul

## Description

|                       |                                                                                                                                                                                                                                                                                         |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name          | NFkB-p65(Phospho-Thr505) Antibody                                                                                                                                                                                                                                                       |
| Host Species          | Rabbit                                                                                                                                                                                                                                                                                  |
| Clonality             | Polyclonal                                                                                                                                                                                                                                                                              |
| Purification          | Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates.<br>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                                                                                                                                                                                                                                                                                      |
| Specificity           | The antibody detects endogenous level of NFkB-p65 only when phosphorylated at Threonine 505.                                                                                                                                                                                            |
| Immunogen Type        | Peptide-KLH                                                                                                                                                                                                                                                                             |
| Immunogen Description | Peptide sequence around phosphorylation site of threonine 505 (L-V-T(p)-G-A) 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.                                                                                                                                                                                               |

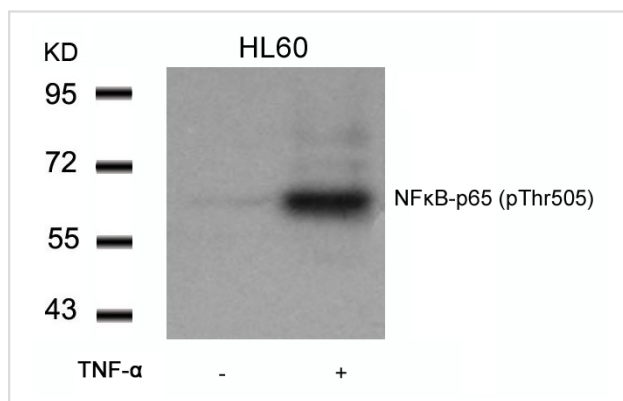
## Application Details

Predicted MW: 65kd

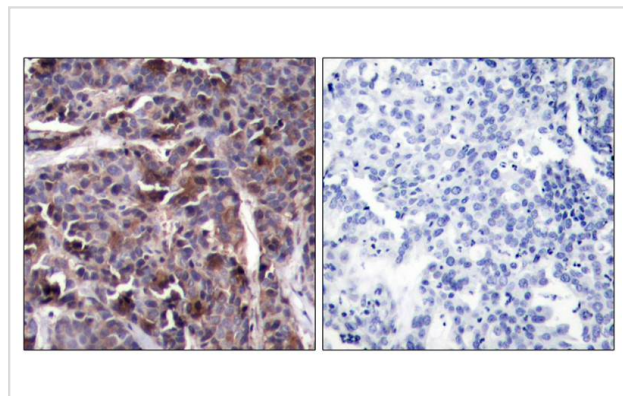
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

## Images



Western blot analysis of extracts from HL60 cells untreated or treated with TNF- $\alpha$  using NF $\kappa$ B-p65(Phospho-Thr505) Antibody #11166.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using NF $\kappa$ B-p65(Phospho-Thr505) Antibody #11166(left) or the same antibody preincubated with blocking peptide(right).

## 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, 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 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.

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

et al., A multi-omics approach based on <sup>1</sup>H-NMR metabolomics combined with target protein analysis to reveal the mechanism of RIAISs on cervical carcinoma. *In Aging (Albany NY)* On 2022 Sep 27 by Chai Yanlan, Aibibai Jielili et al.. PMID:36170024, (2023)

[PMID:36170024](#)

Yanlan Chai Yanlan; Aibibai Jielili; Juan Wang; Haiying Tang; Zi Liu; Ping Wang et al., A multi-omics approach based on <sup>1</sup>H-NMR metabolomics combined with target protein analysis to reveal the mechanism of RIAISs on cervical carcinoma patients, (2023)

[PMID:36170024](#)

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