

## NFkB-p65(Ab-536) Antibody

Catalog No: #21014

Package Size: #21014-1 50ul #21014-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

## Description

Product Name	NFkB-p65(Ab-536) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB IHC
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of total NFkB-p65 protein.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around aa.534~538 (F-S-S-I-A) derived from Human NFkB-p65.
Target Name	NFkB-p65
Other Names	NFkB3; RELA; TF65; Transcription factor p65; p65
Accession No.	Swiss-Prot: Q04206NCBI Protein: NP_001138610.1
Uniprot	Q04206
GeneID	5970;
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.

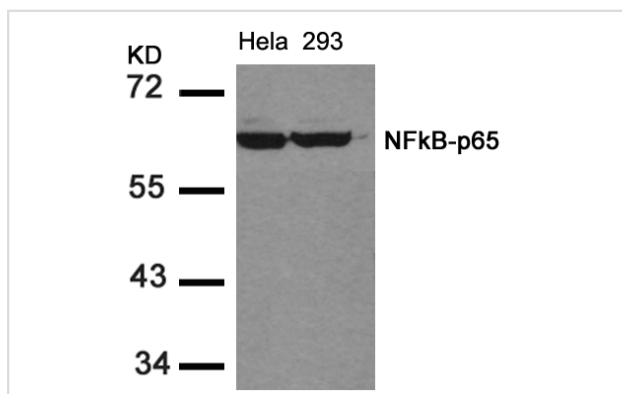
## Application Details

Predicted MW: 65kd

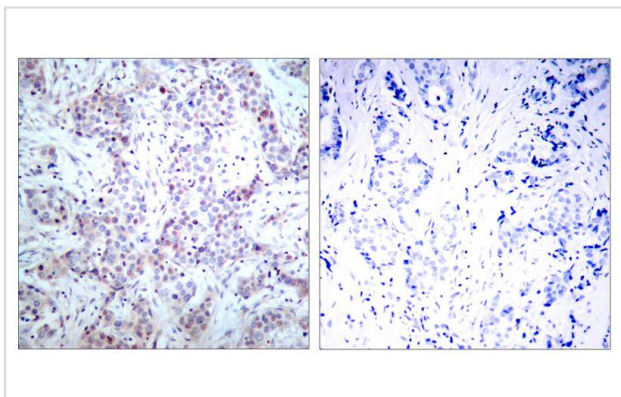
Western blotting: 1:500~1:1000

Immunohistochemistry: 1:50~1:100

## Images



Western blot analysis of extracts from HeLa and 293 cells using NFkB-p65(Ab-536) Antibody #21014.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using NF $\kappa$ B-p65(Ab-536) Antibody #21014(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

Doyle S L, et al. (2005) *J Biol Chem.* 280(25): 23496-23501.

Anwar K N, et al. (2004) *J Immunol.* 173(11): 6965-6972.

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.

Note: This product is for in vitro research use only