NFkB p65(Phospho-Ser536) Antibody

#11014

Catalog Number: 11014-1, 11014-2

Amount: 50μg/50μl, 100μg/100μl

Swiss-Prot No. : Q04206

Form of Antibody: Rabbit IgG in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl,0.02% sodium azide and 50% glycerol.

Storage/Stability: Store at -20℃/1 year

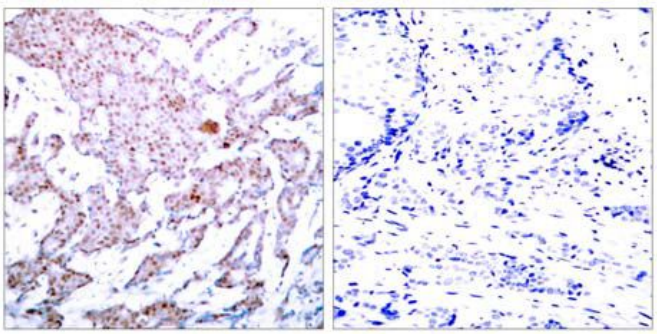
Immunogen: The antiserum was produced against synthesized phosphopeptide derived from human NFκB p65 around the phosphorylation site of serine 536 (F-S-Sp-I-A).

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site

Specificity/Sensitivity:
NF κ B-p65 (phospho-Ser536) antibody detects endogenous levels of NF κ B-p65 only when phosphorylated at serine 536.

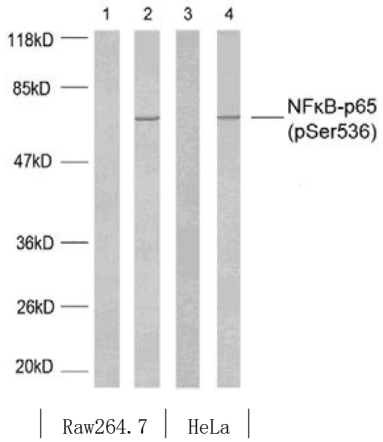
Reactivity: Human,Mouse, Rat

Applications:
Predicted MW: 65kd
WB: 1:500~1:1000 IHC: 1:50~1:100 IF:1:100~1:200



P-Peptide − +

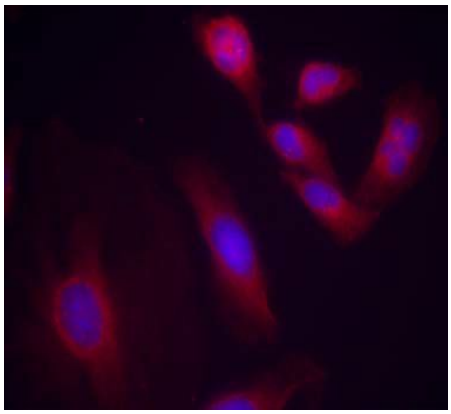
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using NF-κB p65 (Phospho-Ser536) antibody (#11014).



L-1 − + − −

TNF-α − − − +

Western blot analysis using NF-κB p65 (phospho-Ser536) antibody (#11014).



Immunofluorescence staining of methanol-fixed HeLa cells using NF-κB p65(phospho-Ser536) antibody (#11014,Red)

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 p65-c-Rel complexes are transcriptional activators. The NF-kappa-B p65-p65 complex appears to be involved in invasin-mediated activation of IL-8 expression. The inhibitory effect of I-kappa-B upon NF-kappa-B 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. Associates with chromatin at the NF-kappa-B promoter region via association with DDX1

References：

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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.