

#11010

NFκB-p65 (Phospho-Thr254) Antibody



Catalog: #11010-1 50μl **Orders:** order@signalwayantibody.com
#11010-2 100μl **Support:** tech@signalwayantibody.com
Storage: Store at -20°C/1 year **Web:** www.signalwayantibody.com

Application	Species Reactivity	Source	Molecular Wt.
WB IHC IF	Human Mouse Rat	Rabbit Polyconal Ab	65KD

Description: 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.

Specificity: The antibody detects endogenous level of NF-κB p65 only when phosphorylated at threonine 254.

Immunogen: Peptide sequence around phosphorylation site of threonine 254 (F-R-T(p)-P-P) derived from Human NFκB-p65.

Formulation: Supplied at 1.0mg/mL in phosphate buffered saline (without Mg²⁺ and Ca²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.

Synonyms: NFKB3 RELA TF65 Transcription factor p65 p65

Accession No.: Swiss-Prot#: Q04206 NCBI Gene#: 5970
NCBI Protein#: NP_001138610.1

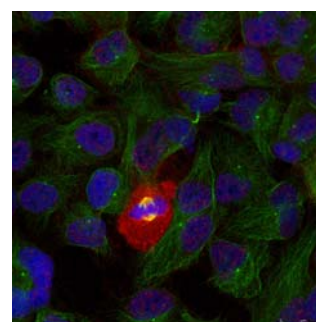
Background: NF-κappa-B is a pleiotropic transcription factor which is present in almost all cell types and is involved in many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NF-κappa-B is a homo- or heterodimeric complex formed by the Rel-like 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-κappa-B is controlled by various mechanisms of post-translational modification and subcellular compartmentalization as well as by interactions with other cofactors or corepressors. NF-κappa-B complexes are held in the cytoplasm in an inactive state complexed with members of the NF-κappa-B inhibitor (I-κappa-B) family. In a conventional activation pathway, I-κappa-B is phosphorylated by I-κappa-B kinases (IKKs) in response to different activators, subsequently degraded thus liberating the active NF-κappa-B complex which translocates to the nucleus. NF-κappa-B heterodimeric p65-p50 and p65-c-Rel complexes are transcriptional activators. The NF-κappa-B p65-p65 complex appears to be involved in invasion-mediated activation of IL-8 expression. The inhibitory effect of I-κappa-B upon NF-κappa-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-κappa-B complex.

References:

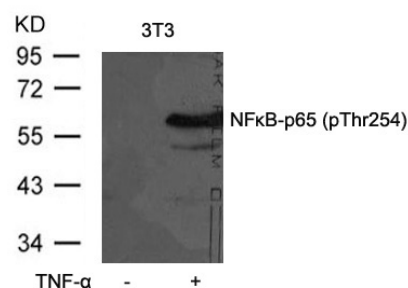
- Yeh PY, et al. (2004) J Biol Chem. 279(25): 26143-26148.
Ryo A, et al. (2003) Mol Cell. 12 (6): 1413-1426.
Baeuerle P A, et al. (1994) Annu Rev Immunol. 12:141-179.
Baeuerle P A, et al. (1996) Cell 87:13-20.
Haskill S, et al. (1991) Cell 65:1281-1289.

Recommended Dilutions:

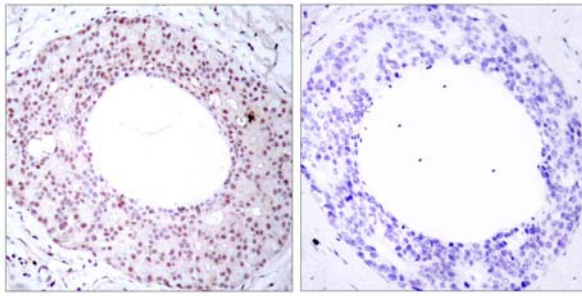
Western blotting 1:500~1:1000
Immunohistochemistry 1:50~1:100
Immunofluorescence 1:100~1:200



Immunofluorescence staining of methanol-fixed HeLa cells using NFκB-p65(Phospho-Thr254) Antibody #11010.



Western blot analysis of extracts from 3T3 cells untreated or treated with TNF-α using NFκB-p65 (Phospho-Thr254) Antibody #11010.



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

Citation:

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Related Pathway: NF-kappa B, Akt, Cancer/Apoptosis, Chromatin/Transcription

Note: For western blotting, incubate membrane with diluted antibody in 5% nonfat milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.