

#21178

NFκB-p65 (Ab-505) Antibody



Catalog: #21178-1 50µl **Orders:** order@signalwayantibody.com
#21178-2 100µl **Support:** tech@signalwayantibody.com
Storage: Store at -20°C/1 year **Web:** www.signalwayantibody.com

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

Description: Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.

Recommended Dilutions:

Immunohistochemistry 1:50~1:100

Specificity: The antibody detects endogenous level of total NFκB-p65 protein.

Immunogen: Peptide sequence around aa.503~507 (L-V-T-G-A) 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.

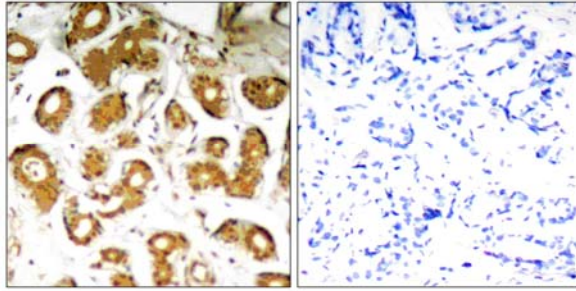
Synonyms: NFKB3 RELA TF65 Transcription factor p65 p65

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

Background: NF-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, NFκB1/p105, NFκB1/p50, REL and NFκB2/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.

References:

- Bauerle P A, et al. (1994) Annu Rev Immunol. 12:141-179.
- Bauerle P A, et al. (1996) Cell 87:13-20.
- Haskill S, et al. (1991) Cell 65:1281-1289.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using NF κ B-p65 (Ab-505) Antibody #21178 (left) or the same antibody preincubated with blocking peptide (right).

Citation:

If you publish research using #21178 please [let us know](#).

Related Pathway: NF-kappa B, 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.