



NFκB p65 (Ab-505) Antibody

#21178

Catalog Number: 21178-1, 21178-2

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°C/1 year

Immunogen: The antiserum was produced against synthesized non-phosphopeptide derived from human NFκB p65 around the phosphorylation site of threonine 505 (L-V-Tp-G-A).

Purification: The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen

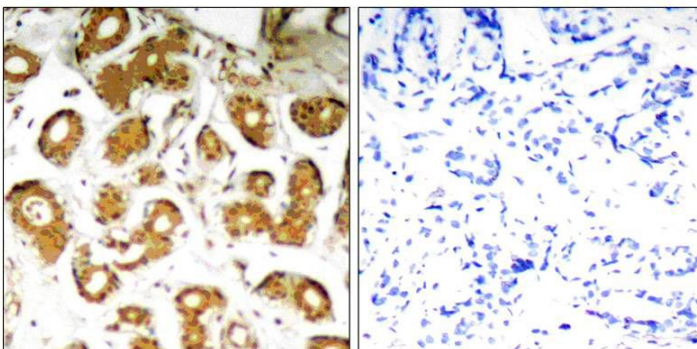
Specificity/Sensitivity: NF-κB p65 (Ab-505) antibody detects endogenous levels of total NF-κB p65 protein

Reactivity: Human, Mouse, Rat

Applications:

Predicted MW: 65kd

IHC: 1:50~1:100



Peptide - +

Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using NF- κ B p65 (Ab-505) antibody (#21178).

Background :

NF- κ 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- κ 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 κ B sites in the DNA of their target genes and the individual dimers have distinct preferences for different κ B sites that they can bind with distinguishable affinity and specificity. Different dimer combinations act as transcriptional activators or repressors, respectively. NF- κ B is controlled by various mechanisms of post-translational modification and subcellular compartmentalization as well as by interactions with other cofactors or corepressors. NF- κ B complexes are held in the cytoplasm in an inactive state complexed with members of the NF- κ B inhibitor (I- κ B) family. In a conventional activation pathway, I- κ B is phosphorylated by I- κ B kinases (IKKs) in response to different activators, subsequently degraded thus liberating the active NF- κ B complex which translocates to the nucleus. NF- κ B heterodimeric p65-p50 and p65-c-Rel complexes are transcriptional activators. The NF- κ B p65-p65 complex appears to be involved in invasion-mediated activation of IL-8 expression. The inhibitory effect of I- κ B upon NF- κ 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- κ B complex. Associates with chromatin at the NF- κ B promoter region via association with DDX1

References:

- 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.