



Rabbit anti-Human NF-kB p65 (phospho T254) polyclonal antibody (DPABH-24952)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description

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. Associates with chromatin at the NF-kappa-B promoter region via association with DDX1.

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| Immunogen | Synthetic peptide corresponding to Human NF-kB p65 conjugated to Keyhole Limpet Haemocyanin (KLH). |
| Isotype | IgG |
| Source/Host | Rabbit |

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| Species Reactivity | Human |
| Purification | Protein A purified |
| Conjugate | Unconjugated |
| Applications | WB, IHC-P, ICC/IF |
| Format | Liquid |
| Size | 100 µg |
| Buffer | pH: 7.40; Constituents: 49% PBS, 50% Glycerol, 0.88% Sodium chloride. Note: PBS is without Mg2+ and Ca2+ |
| Preservative | 0.02% Sodium Azide |
| Storage | Store at 4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Stable for 12 months at -20°C. |

GENE INFORMATION

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| Gene Name | RELA v-rel avian reticuloendotheliosis viral oncogene homolog A [Homo sapiens] |
| Official Symbol | RELA |
| Synonyms | RELA; v-rel avian reticuloendotheliosis viral oncogene homolog A; p65; NFkB3; transcription factor p65; NF-kappa-B p65delta3; nuclear factor NF-kappa-B p65 subunit; v-rel reticuloendotheliosis viral oncogene homolog A; nuclear factor of kappa light polypeptide gene enhancer in B-cells 3; |
| Entrez Gene ID | 5970 |
| Protein Refseq | NP_001138610.1 |
| UniProt ID | Q04206 |
| Pathway | AGE/RAGE pathway; Activation of NF-kappaB in B cells; Acute myeloid leukemia; Adipocytokine signaling pathway |
| Function | DNA binding; NF-kappaB binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding transcription factor activity involved in negative regulation of transcription |