## Anti-NF-kB p65 Antibody

### Catalog # ABO10580

## Specification

<table>
<thead>
<tr>
<th>Application</th>
<th>WB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Accession</td>
<td>Q04206</td>
</tr>
<tr>
<td>Host</td>
<td>Rabbit</td>
</tr>
<tr>
<td>Reactivity</td>
<td>Human, Mouse, Rat</td>
</tr>
<tr>
<td>Clonality</td>
<td>Polyclonal</td>
</tr>
<tr>
<td>Format</td>
<td>Lyophilized</td>
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</tbody>
</table>

**Description**
Rabbit IgG polyclonal antibody for Transcription factor p65(RELA) detection. Tested with WB in Human; Mouse; Rat.

**Reconstitution**
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

## Anti-NF-kB p65 Antibody - Additional Information

### Gene ID
5970

### Other Names
Transcription factor p65, Nuclear factor NF-kappa-B p65 subunit, Nuclear factor of kappa light polypeptide gene enhancer in B-cells 3, RELA, NFKB3

### Calculated MW
60219 MW KDa

### Application Details
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

### Subcellular Localization
Nucleus. Cytoplasm. Colocalized with DDX1 in the nucleus upon TNF-alpha induction (By similarity). Nuclear, but also found in the cytoplasm in an inactive form complexed to an inhibitor (I-kappa-B). Colocalizes with GFI1 in the nucleus after LPS stimulation.

### Protein Name
Transcription factor p65

## Immunogen
A synthetic peptide corresponding to a

## Anti-NF-kB p65 Antibody - Background

The p65(RELA) heterodimer is the most abundant form of NFKB. This gene is located on 11q13, which consists of 10 exons and spans about 8.1 kb of DNA. In rat sciatic nerves, the expression of the activated p65 subunit of NFKB was high in the nuclei of premyelinating Schwann cells and then progressively declined until it was nearly absent in adults. The transcriptional activity of NF-kappa-B is stimulated upon phosphorylation of its p65 subunit on serine-276 by protein kinase A(PKA). The transcriptional coactivator CBP/p300 associates with NF-kappa-B p65 through 2 sites, an N-terminal domain that interacts with the C-terminal region of unphosphorylated p65, and a second domain that only interacts with p65 phosphorylated on serine-276.
sequence at the N-terminus of human NF-kB p65(116-131aa AISQRIQTNNNPFQVP), identical to the related rat sequence, and different from the related mouse sequence by one amino acid.

**Purification**
Immunogen affinity purified.

**Cross Reactivity**
No cross reactivity with other proteins

**Storage**
At -20°C for one year. After constitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

**Sequence Similarities**
Contains 1 RHD (Rel-like) domain.

**Anti-NF-kB p65 Antibody - Protein Information**

**Name** RELA

**Synonyms** NFKB3

**Function**
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. The heterodimeric RELA-NFKB1 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. The NF-kappa-B heterodimeric RELA-NFKB1 and RELA-REL complexes, for instance, function as transcriptional activators. 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. The inhibitory effect of I-
kappa-B on NF-kappa-B through retention in
the cytoplasm is exerted primarily through
the interaction with RELA. RELA shows a weak
DNA- binding site which could contribute
directly to DNA binding in the NF- kappa-B
complex. Beside its activity as a direct
transcriptional activator, it is also able to
modulate promoters accessibility to
transcription factors and thereby indirectly
regulate gene expression. Associates with
chromatin at the NF-kappa-B promoter region
via association with DDX1. Essential for
cytokine gene expression in T- cells
ations/15790681" target="_blank">15790681</a>). The
NF-kappa-B homodimeric RELA-RELA complex
appears to be involved in invasin-mediated
activation of IL-8 expression.

Cellular Location
Nucleus. Cytoplasm. Note=Nuclear, but also
found in the cytoplasm in an inactive form
complexed to an inhibitor (I-kappa-B)
(PubMed:1493333). Colocalized with DDX1 in
the nucleus upon TNF-alpha induction
(PubMed:19058135). Colocalizes with GF11 in
the nucleus after LPS stimulation
(PubMed:20547752). Translocation to the
nucleus is impaired in L.monocytogenes
infection (PubMed:20855622)

Anti-NF-kB p65 Antibody - Protocols
Provided below are standard protocols that you
may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytometry
- Cell Culture