



## Rabbit Anti-phospho-NFKB p65 (Ser281) antibody

SL17502R

<b>Product Name:</b>	phospho-NFKB p65 (Ser281)
<b>Chinese Name:</b>	磷酸化The nucleus因子抗体
<b>Alias:</b>	NF-kB p65 (phospho S281); p-NF-kB p65 (phospho S281); NF kB P65; NF-kB p65; Avian reticuloendotheliosis viral (v rel) oncogene homolog A; MGC131774; NF kappa B p65delta3; NFKB3; Nuclear Factor NF Kappa B p65 Subunit; Nuclear factor NF-kappa-B p65 subunit; Nuclear factor of kappa light polypeptide gene enhancer in B cells 3; Nuclear factor of kappa light polypeptide gene enhancer in B-cells 3; OTTHUMP00000233473; OTTHUMP00000233474; OTTHUMP00000233475; OTTHUMP00000233476; OTTHUMP00000233900; p65; p65 NF kappaB; p65 NFkB; relA; TF65_HUMAN; Transcription factor p65; v rel avian reticuloendotheliosis viral oncogene homolog A (nuclear factor of kappa light polypeptide gene enhancer in B cells 3 (p65)); v rel reticuloendotheliosis viral oncogene homolog A (avian); V rel reticuloendotheliosis viral oncogene homolog A, nuclear factor of kappa light polypeptide gene enhancer in B cells 3, p65.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=1µg/TestICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	61kDa
<b>Cellular localization:</b>	The nucleuscytoplasmic
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthesised phosphopeptide derived from human NFKB p65 around the phosphorylation site of Ser281:EL(p-S)EP
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A

<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	<p>NF-kappa-B is a ubiquitous transcription factor involved in several biological processes. It is held in the cytoplasm in an inactive state by specific inhibitors. Upon degradation of the inhibitor, NF-kappa-B moves to the nucleus and activates transcription of specific genes. NF-kappa-B is composed of NFKB1 or NFKB2 bound to either REL, RELA, or RELB. The most abundant form of NF-kappa-B is NFKB1 complexed with the product of this gene, RELA. Four transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011].</p> <p><b>Function:</b>  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.</p> <p><b>Subcellular Location:</b>  Nucleus. Cytoplasm. Nuclear, but also found in the cytoplasm in an inactive form complexed to an inhibitor (I-kappa-B). Colocalized with RELA in the nucleus upon TNF-alpha induction.</p> <p><b>Post-translational modifications:</b>  Ubiquitinated, leading to its proteasomal degradation. Degradation is required for termination of NF-kappa-B response.</p>

Monomethylated at Lys-310 by SETD6. Monomethylation at Lys-310 is recognized by the ANK repeats of EHMT1 and promotes the formation of repressed chromatin at target genes, leading to down-regulation of NF-kappa-B transcription factor activity. Phosphorylation at Ser-311 disrupts the interaction with EHMT1 without preventing monomethylation at Lys-310 and relieves the repression of target genes. Phosphorylation at Ser-311 disrupts the interaction with EHMT1 and promotes transcription factor activity (By similarity). Phosphorylation on Ser-536 stimulates acetylation on Lys-310 and interaction with CBP; the phosphorylated and acetylated forms show enhanced transcriptional activity. Reversibly acetylated; the acetylation seems to be mediated by CBP, the deacetylation by HDAC3. Acetylation at Lys-122 enhances DNA binding and impairs association with NFKBIA. Acetylation at Lys-310 is required for full transcriptional activity in the absence of effects on DNA binding and NFKBIA association. Acetylation can also lower DNA-binding and results in nuclear export. Interaction with BRMS1 promotes deacetylation of 'Lys-310'.

**Similarity:**

Contains 1 RHD (Rel-like) domain.

**SWISS:**

Q04206

**Gene ID:**

5970

**Database links:**

[Entrez Gene: 5970](#) Human

[Entrez Gene: 19697](#) Mouse

[Entrez Gene: 309165](#) Rat

[Omin: 164014](#) Human

[SwissProt: Q04206](#) Human

[SwissProt: Q04207](#) Mouse

[Unigene: 502875](#) Human

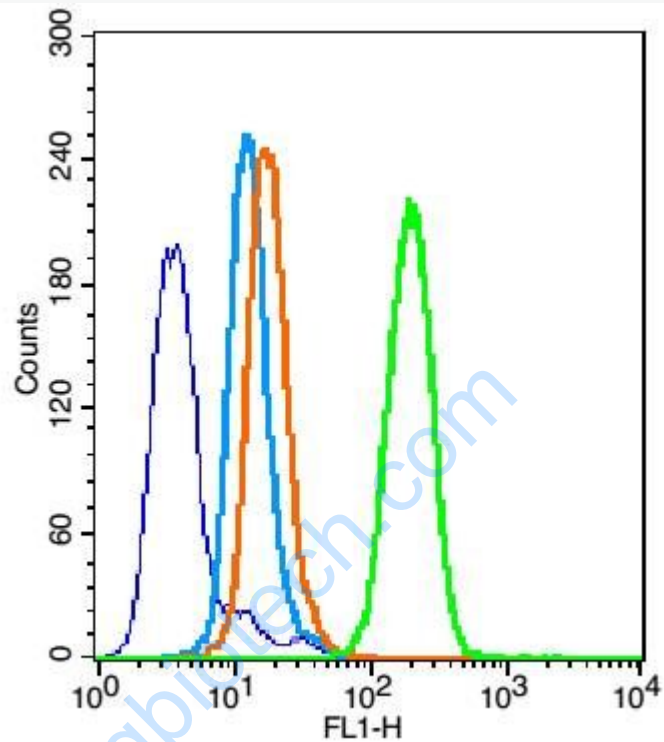
[Unigene: 249966](#) Mouse

[Unigene: 19480](#) Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human,

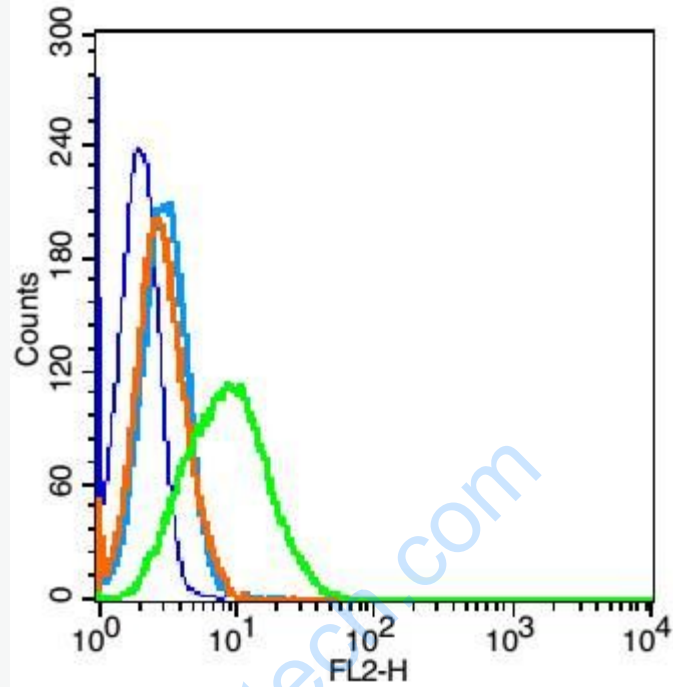
therapeutic or diagnostic applications.



**Picture:**

Overlay histogram showing HL 60 cells stained with bs-17502R (Green line).

The cells were fixed with 90% methanol (5 min) and then permeabilized with 0.01M PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (SL17502R) for 30 min at 22°C. The secondary antibody used was fluorescein isothiocyanate goat anti-rabbit IgG (H+L) (SL17502R) at 1/200 dilution for 30 min at 22°C. Isotype control antibody was rabbit IgG (polyclonal,bs-0295P,Orange line) (1µg/1x10<sup>6</sup> cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of 20,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Blank control(blue): Jurkat cells(fixed with 2% paraformaldehyde (10 min) , then permeabilized with 90% ice-cold methanol for 30 min on ice).

Primary Antibody:Rabbit Anti-phospho-NFKB p65 (Ser281)antibody antibody(SL17502R), Dilution: 1 $\mu$ g in 100  $\mu$ L 1X PBS containing 0.5% BSA;

Isotype Control Antibody: Rabbit IgG(orange) ,used under the same conditions );

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA.