



## NF $\kappa$ B-p65 (Acetyl-Lys314/315) Antibody

#15004

**Catalog Number:** 15004-1, 15004-2

**Amount:** 50 $\mu$ g/50 $\mu$ l, 100 $\mu$ g/100 $\mu$ l

**Swiss-Prot No. :**Q04206

**Form of Antibody:** Rabbit IgG in phosphate buffered saline (without Mg<sup>2+</sup> and Ca<sup>2+</sup>), 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 peptide derived from Human NF  $\kappa$  B-p65 around the acetylation site of Lysine314/315.

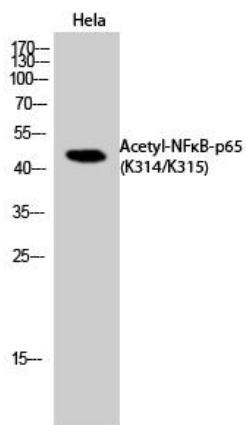
**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Specificity/Sensitivity:** NF $\kappa$ B-p65 (Acetyl-Lys314/315) Antibody detects endogenous levels of NF $\kappa$ B-p65 protein only when acetylated at Lys314/315.

**Reactivity:** Human, Mouse, Rat

### Applications:

Predicted MW: 60kd      WB: 1:500~1:2000      IHC: 1:50-100



Western Blot analysis of HeLa cells using

Acetyl-NF $\kappa$ B-p65 (K314/K315) Antibody.

**Background :**

Transcription factors of the nuclear factor  $\kappa$  B (NF- $\kappa$  B)/Rel family is a ubiquitously expressed transcription factor that regulates many cytokine and Ig genes. It is involved in immune, inflammatory, viral, and acute phase responses. There are five family members in mammals: RelA (p65), c-Rel, RelB, NF- $\kappa$  B1 (p105/p50) and NF- $\kappa$  B2 (p100/p52). The most studied NF- $\kappa$  B complex consists of the p50 and p65 subunits, both containing a 300 amino acid region with homology to the Rel proto-oncogene product. The p50 subunit binds DNA, whereas the p65 subunit is responsible for the interaction of NF- $\kappa$  B with its inhibitor, I $\kappa$  B. In most cell types, the p50/p65 heterodimer is located within the cytoplasm complexed to I $\kappa$  B. This complex prevents nuclear translocation and activity of NF- $\kappa$  B. In response to stimuli such as cytokines, LPS, and viral infections, I $\kappa$  B is phosphorylated at critical residues. This phosphorylation induces dissociation of the I $\kappa$  B/NF- $\kappa$  B complex, allowing the free heterodimeric NF- $\kappa$  B to form a heterotetramer that translocates to the nucleus. In the nucleus, it binds to the  $\kappa$  B site within promoters and enhancers and functions as a transcriptional activator.

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