

## Recombinant NFκB3 (RELA / p65) protein

**Catalog No:** 81086, 81786

**Lot No:** 31017001

**Expressed In:** Baculovirus

**Quantity:** 20, 1000 µg

**Concentration:** 0.25 µg/µl

**Source:** Human

**Buffer Contents:** Recombinant NFκB3 (RELA / p65) protein is supplied in 25 mM HEPES-NaOH pH 7.5, 300 mM NaCl, 10% glycerol, 0.04% Triton X-100 and 0.5 mM TCEP.

**Background:** NFκB3 (Nuclear Factor Of Kappa Light Polypeptide Gene Enhancer In B-Cells 3), also known as RELA (V-Rel Avian Reticuloendotheliosis Viral Oncogene Homolog A) or p65, is a ubiquitous transcription factor involved in several biological processes. NFκB 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 and the heterodimeric p65-p50 complex appears to be most abundant one.

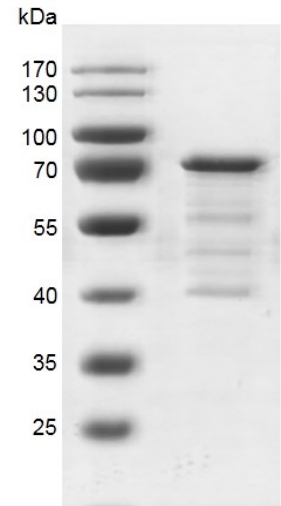
The NFκB dimers bind at κ-B sites in the DNA of their target genes and the individual dimers have distinct preferences for different κ-B sites that they can bind with distinguishable affinity and specificity. Different dimer combinations act as transcriptional activators or repressors, respectively.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

**Protein Details:** Recombinant human NFκB3 (RELA / p65) protein was expressed in a baculovirus expression system as the full length protein (accession number NP\_068810.3) with an N-terminal FLAG tag. The molecular weight of the protein is 61.3 kDa.

**Application Notes:** This protein is suitable for use in protein-protein interaction, *in vitro* transcription assay, binding assay.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

### NFκB3 (RELA / p65)



**Recombinant NFκB3 (RELA / p65) protein gel**  
10% SDS-PAGE Coomassie staining  
MW: 61.3 kDa  
Purity: >80%