

PRODUCT INFORMATION



NF- κ B (p65) (human, recombinant)

Item No. 10009819

Overview and Properties

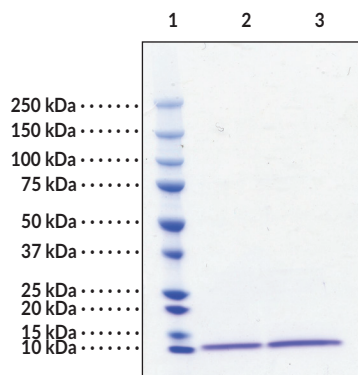
Synonyms: NF- κ B3, Nuclear Factor- κ B (p65)
Source: Recombinant N-terminal histidine-tagged p65 (386-480) expressed in *E. coli*
Amino Acids: 386-480
Uniprot No.: Q04206
Molecular Weight: 12.1 kDa
Storage: -80°C (as supplied)
Stability: ≥ 1 year
Supplied in: 50 mM HEPES, pH 8.0, with 150 mM sodium chloride, 10% glycerol

Protein

Concentration: *batch specific* mg/ml

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Image



Lane 1: MW Markers
Lane 2: NF- κ B p65 (2 μ g)
Lane 3: NF- κ B p65 (4 μ g)

Representative gel image shown; actual purity may vary between each batch.

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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Description

NF- κ B p65 is a ubiquitously expressed transcription factor that is a subunit of the NF- κ B complex and is encoded by the *RELA* gene in humans.¹ It is composed of an N-terminal Rel homology domain, which mediates dimerization, nuclear localization, and DNA and protein interactions, and two C-terminal transactivation domains that are subject to a variety of post-translational modifications and regulate the transcriptional activity of p65.^{1,2} NF- κ B p65 regulates the expression of a large number of genes in response to inflammatory and environmental cues that play critical roles in innate and adaptive immunity and cellular differentiation.² Genome-wide deletion of *Rela* in mice is embryonic lethal.³ Silencing of *Rela* induces tumor cell apoptosis in a murine Lewis lung carcinoma model, and *RELA* silencing in THP-1 monocytes decreases secreted levels of IL-1 β and TNF- α induced by LPS.^{4,5} NF- κ B p65 is overexpressed in the inflamed joints of patients with rheumatoid arthritis and naïve CD4 T cells isolated from the whole blood of patients with multiple sclerosis have increased phosphorylation of NF- κ B p65.^{6,7} Cayman's NF- κ B (p65) (human, recombinant) protein can be used for Western blot and ELISA applications.

References

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6. Makarov, S.S. NF- κ B in rheumatoid arthritis: A pivotal regulator of inflammation, hyperplasia, and tissue destruction. *Arthritis Res.* **3**(4), 200-206 (2001).
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