

## Recombinant NFκB p50 protein

**Catalog No:** 81310, 81610

**Expressed In:** Baculovirus

**Quantity:** 20, 1000 µg

**Concentration:** 0.3 µg/µl

**Source:** Human

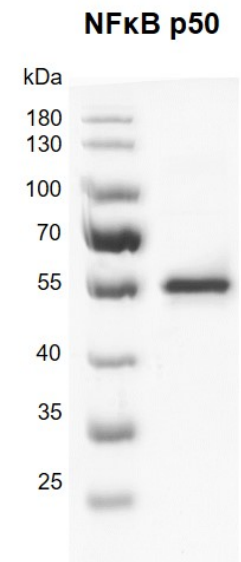
**Buffer Contents:** Recombinant NFκB p50 protein is supplied in 25 mM HEPES-NaOH pH 7.5, 500 mM NaCl, 10% glycerol, 0.04% Triton X-100, and 0.5 mM TCEP.

**Background:** NFκB1 (Nuclear Factor Kappa B Subunit 1), also known as NFKB1 or 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. The 105 kD protein can undergo co-translational processing by the 26S proteasome to produce a 50 kD protein. It is a Rel protein-specific transcription inhibitor and the 50 kD protein is a DNA binding subunit of the NF-kappa-B (NFKB) protein complex. NFKB1 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. NFKB1 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p105 and generation of p50 by a co-translational processing. The proteasome-mediated process ensures the production of both p50 and p105 and preserves their independent function, although processing of NFKB1/p105 also appears to occur post-translationally.

**Protein Details:** Recombinant NFκB p50 protein includes amino acid 1-434 of NFKB1 (accession number NP\_003989.2) was expressed in a baculovirus system with an N-terminal FLAG-Tag. The molecular weight of the protein is 48.8 kDa.

**Application Notes:** This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

**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 guaranteed for 6 months from date of arrival.



**Recombinant NFκB p50 protein gel**

10% SDS-PAGE with Coomassie blue staining

MW: 48.8 kDa

Purity: >90%