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## HIGH PERFORMANCE ANTIBODIES ... AND MORE

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## NF-kB p50 highly active Recombinant Protein

CATALOG NUMBER: 90-349

Specifications	
SPECIES:	Human
SOURCE SPECIES:	Sf21 cells
SEQUENCE:	Human NF-kappaB (p50) is fused to a His-tag.
FUSION TAG:	His Tag
TESTED APPLICATIONS:	
APPLICATIONS:	This recombinant proteins is for research use only.
BIOLOGICAL ACTIVITY:	~1ng is required for high mobility shift assay.~5ng are required for reconstituted transcription assays.
Properties	
PURITY:	>95% (SDS-PAGE)
PHYSICAL STATE:	Liquid
BUFFER:	In 50mM TRIS-HCl, pH 7.5, containing 100mM sodium chloride, 0.2% NP-40, 50-100mM imidazole and 10% glycerol.
CONCENTRATION:	Lot dependent (approx. 0.2mg/ml)
STORAGE CONDITIONS:	Stable for at least 6 months after receipt when stored at -80°C.
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Additional Info	
ALTERNATE NAMES:	Nuclear Factor NF-kappaB p50 Subunit
ACCESSION NO.:	P19838
PROTEIN GI NO.:	259155302

## **Background**

NF-kappaB 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-kappaB 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. The heterodimeric p65-p50 complex is the most abundant complex. The dimers bind at kappaB sites in the DNA of their target genes and the individual dimers have distinct preferences for different kappaB sites that they can bind with distinguishable affinity and specificity. Different dimer combinations act as transcriptional activators or repressors, respectively. NF-kappaB complexes are held in the cytoplasm in an inactive state complexed with members of the NF-kappaB inhibitor (I-kappaB) family. In a conventional activation pathway, IkappaB is phosphorylated by I-kappaB kinases (IKKs) in response to different activators, subsequently degraded thus liberating the active NFkappaB complex which translocates to the nucleus. NF-kappaB heterodimeric p65-p50 and RelB-p50 complexes are transcriptional activators. The NF-kappaB p50-p50 homodimer is a transcriptional repressor, but can act as a transcriptional activator when associated with BCL3.

## FOR RESEARCH USE ONLY