

# Active Recombinant Full Length Human RELA Protein, C-Flag-tagged

**Cat. No.** RELA-11HFL    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Full Length Human RELA Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
<b>Species</b>	Human
<b>Source</b>	Mammalian Cells
<b>Description</b>	NF-kappa-B is a ubiquitous transcription factor involved in several biological processes. It is held in the cytoplasm in an inactive state by specific inhibitors. Upon degradation of the inhibitor, NF-kappa-B moves to the nucleus and activates transcription of specific genes. NF-kappa-B is composed of NFKB1 or NFKB2 bound to either REL, RELA, or RELB. The most abundant form of NF-kappa-B is NFKB1 complexed with the product of this gene, RELA. Four transcript variants encoding different isoforms have been found for this gene.
<b>Form</b>	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
<b>Bio-activity</b>	RELA Activity Verified in a DNA-binding Assay: RELA activity was measured in a colorimetric DNA-binding assay. Double-stranded oligonucleotide containing the RELA consensus DNA-binding sequence was incubated with dilutions of the purified RELA protein. RELA bound to the oligo was captured onto the surface of a microtiter plate and after washing, bound RELA was detected with an anti-RELA primary antibody followed by an HRP-labeled secondary antibody. After initial color

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development, the reaction was quenched and the color intensity was measured at 450nm.

ELISA binding assay

WB positive control

EMSA assay

Binding assay

Pull-down assay

**Molecular Mass** 60 kDa

**AA Sequence**

MDELFLIFPAEPAQASGPYVEIIEQPKQRGMRFYKCEGRSAGSIPGERSTDTTKT  
 HPTIKINGYTGPG TVRISLVTKDPPHRPHPELVGKDCRDGFYEAELCPDRCIHSFQ  
 NLGIQCVKKRDLEQAISQRIQTNNNP FQVPIEEQRGDYDLNAVRLCFQVTVRDPSPG  
 RPLRLPPVLSHPIFDNRAPNTAELKICRVNRNSGSLGGD EIFLLCDKVQKEDIEVYF  
 TGPGWEARGSFQADVHRQVAIVFRTPPYADPSLQAPVRVSMQLRRPSDREL SEP  
 MEFQYLPDDDRHRIEEKRKRTYETFKSIMKKSPFSGPTDPRPPRRIAVPSRSSAS  
 VPKPAPQPYP FTSSLSTINYDEFPTMVFPSPGQISQASALAPAPPQVLPQAPAPAPAP  
 AMVSALAQAPAPVPVLAPGPPQA VAPPAPKPTQAGEGTLSEALLQLQFDDEDL GAL  
 LGNSTDPAVFTDLASVDNSEFQQLLNQGIPVAPHTTE  
 PMLMEYPEAITRLVTGAQRPPDPAPAPLGAPGLPNGLLSGDEDFSSIADMDFSALLS  
 QISSTRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Purity** > 80% as determined by SDS-PAGE and Coomassie blue staining.

**Stability** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**Storage** Store at -80 centigrade.

**Concentration** >50 ug/mL as determined by microplate BCA method.

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<b>Preparation</b>	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
<b>Protein Families</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways</b>	Acute myeloid leukemia, Adipocytokine signaling pathway, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Cytosolic DNA-sensing pathway, Epithelial cell signaling in Helicobacter pylori infection, MAPK signaling pathway, Neurotrophin signaling pathway, NOD-like receptor signaling pathway, Pancreatic cancer, Pathways in cancer, Prostate cancer, RIG-I-like receptor signaling pathway, Small cell lung cancer, T cell receptor signaling pathway, Toll-like receptor signaling pathway
<b>Full Length</b>	Full L.

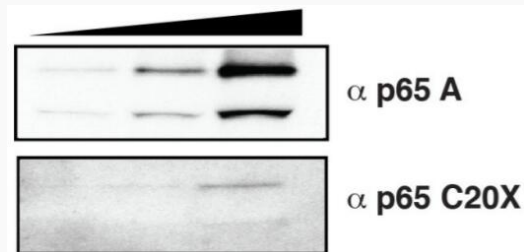
## GENE INFORMATION

<b>Gene Name</b>	RELA RELA proto-oncogene, NF-kB subunit [ Homo sapiens (human) ]
<b>Official Symbol</b>	RELA
<b>Synonyms</b>	p65; CMCU; NFKB3
<b>Gene ID</b>	5970
<b>mRNA Refseq</b>	NM_021975.4
<b>Protein Refseq</b>	NP_068810.3
<b>MIM</b>	164014

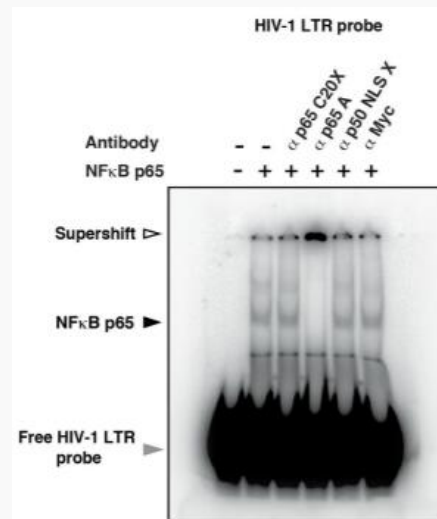
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**UniProt ID**
**Q04206**



Western blot analysis of the recombinant NFkBp65 preparation to check the specificity of two anti-NFkBp65 antibodies: A and C20X. NFkBp65 (25, 50, and 100 ng) was resolved on a NuPAGE 4 - 12% PAGE in MOPs buffer and subjected to Western blot.



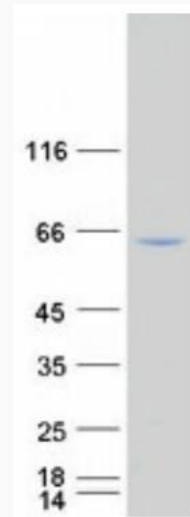
EMSA examines NFkBp65 DNA binding activity. HIV-1 LTR DNA probe was incubated with 100 ng of purified NFkBp65, and the NFkBp65-DNA complexes were resolved on a 6% non-denaturing polyacrylamide/bisacrylamide gel. NFkBp65-DNA

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complexes were super-shifted by the addition of anti-NFkBp65 antibody.  
AntiNFkBp50 antibody and anti-Myc IgG served as controls.



Coomassie blue staining of purified RELA protein.

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