

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

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

SPECIFICATION

Product Overview	Recombinant Full Length Human RELA Protein, fused to Flag-tag at C-terminus, was expressed in Mammalian cells.
Species	Human
Source	Mammalian Cells
Description	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.
Form	25 mM Tris HCl, pH 7.3, 100 mM glycine, 10% glycerol.
Bio-activity	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

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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

MDELFLIFPAEPAQASGPYVEIIEQPKQRGMRFRYKCEGRSAGSIPGERSTDTTKT
HPTIKINGYTGGP TVRISLVTKDPPHRPHPELVGKDCRDGFYEAELCPDRCIHSFQ
NLGIQCVKKRDLEQAISQRIQTNNNP FQVPIEEQRGDYDLNAVRLCFQVTVRDPSPG
RPLRLPPVLSHPIDNRAPNTAELKICRVNRNSGSLGGD EIFLLCDKVQKEDIEVYF
TGPGWARGSFQADVHRQVAIVFRTPPYADPSLQAPVRVSMQLRRPSDREL SEP
MEFQYLPDDDRHRIEEKRKRTYETFKSIMKKSPFSGPTDPRPPPRRIAVPSRSSAS
VPKPAPQPYP FTSSLSTINYDEFPTMVFPSPGQISQASALAPAPPQVLPQAPAPAPAP
AMVSALAQAPAPVPVLAPGPPQA VAPPAPKPTQAGEGTLSEALLQLQFDDDLGAL
LGNSTDAVFTDLASVDNSEFQQLLNQGIPVAPHTTE
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.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Preparation	Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.
Protein Families	Druggable Genome, Transcription Factors
Protein Pathways	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
Full Length	Full L.

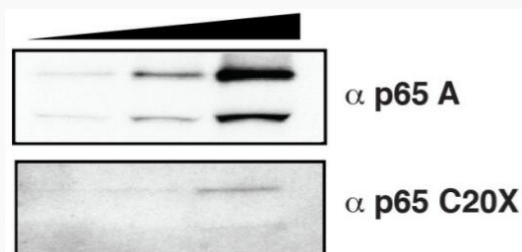
GENE INFORMATION

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

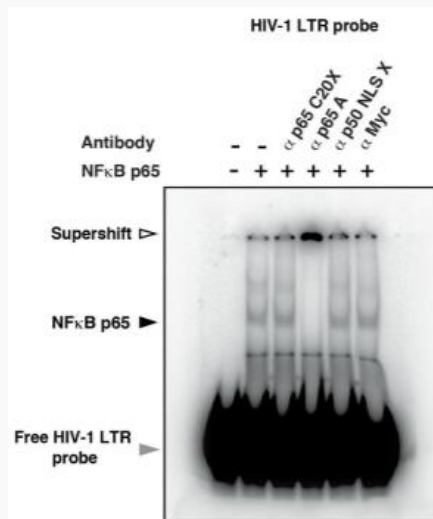
 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

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.



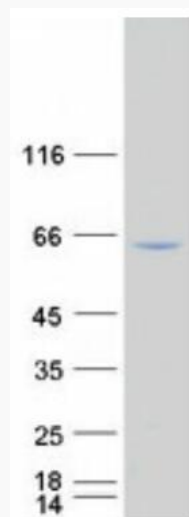
EMSA examines NFkBp65 DNA binding activity. HIV-1 LTR DNA probe was incubated with 100 ng of purified NFkBp65, and the NFkBp65-DNA complexes were resolved on a 6% non-denaturing polyacrylamide/bisacrylamide gel. NFkBp65-DNA

Tel: 1-631-559-9269 1-516-512-3133

Email: info@creative-biomart.com Fax: 1-631-938-8127

45-1 Ramsey Road, Shirley, NY 11967, USA

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.