

Product datasheet for **SC313967**

NF-kB p65 (RELA) (NM_021975) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NF-kB p65 (RELA) (NM_021975) Human Untagged Clone
Tag:	Tag Free
Symbol:	NF-kB p65
Synonyms:	CMCU; NFKB3; p65
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for NM_021975 edited
GAATTCGGCACGAGGCGCCCCGGGACCCCGGCCATGGACGAACTGTTCCCCCTCATCTT
CCCCGGCAGAGCCAGCCCAGGCCTCTGGCCCTATGTGGAGATCATTGAGCAGCCCAAGCA
GCGGGGCATGCGCTTCCGCTACAAGTGCAGGGGCGCTCCGCGGGCAGCATCCCAGGCGA
GAGGAGCACAGATACCACCAAGACCCACCCACCATCAAGATCAATGGCTACACAGGACC
AGGGACAGTGCGCATCTCCCTGGTCAACAAGACCCTCCTCACCGGCCTACCCCCACGA
GCTTGTAGGAAAGGACTGCCGGGATGGCTTCTATGAGGCTGAGCTCTGCCCGGACCGTGC
CATCCACAGTTTTCCAGAACCTGGGAATCCAGTGTGTGAAGAAGCGGGACCTGGAGCAGGC
TATCAGTCAGCGCATCCAGACCAACAACAACCCCTTCCAAGTTCTATAGAAGAGCAGCG
TGGGGACTACGACCTGAATGCTGTGCGGCTCTGCTTCCAGGTGACAGTGCGGGACCCATC
AGGCAGGCCCTCCGCTGCCGCTGTCTTTCTCATCCATCTTTGACAATCGTGCCCC
CAACACTGCCGAGCTCAAGATCTGCCGAGTGAACCGAACTCTGGCAGCTGCCTCGGTGG
GGATGAGATCTTCTACTGTGTGACAAGGTGCAGAAAGAGGACATTGAGGTGATTTTAC
GGGACCAGGCTGGGAGGCCCGAGGCTCCTTTTCGAAGCTGATGTGCCCGACAAGTGGC
CATTGTGTTCCGGACCCCTCCCTACGCAGACCCAGCCTGCAGGCTCCTGTGCGTGTCTC
CATGCAGCTGCGGCGGCCTCCGACCGGAGCTCAGTGAGCCCATGGAATTCCAGTACCT
GCCAGATACAGACGATCGTCACCGGATTGAGGAGAAACGTAAGGACATATGAGACCTT
CAAGAGCATCATGAAGAAGAGTCTTTACGCGGACCCACCGACCCCGGCCTCCACCTCG
ACGCATTGCTGTGCCTTCCCGCAGCTCAGCTTCTGTCCCCAAGCCAGCACCCAGCCCTA
TCCCTTACGTATCCCTGAGCACCATCAACTATGATGAGTTTCCACCATGGTGTTTCC
TTCTGGGCAGATCAGCCAGGCCTCGGCCTTGGCCCCGGCCCTCCCAAGTCTGCCCA
GGCTCCAGCCCTGCCCTGCTCCAGCCATGGTATCAGCTCTGGCCAGGCCCCAGCCCC
TGTCACAGTCTAGCCCCAGGCCCTCCTCAGGCTGTGGCCCACTGCCCAAGCCAC
CCAGGCTGGGGAAGGAACGCTGTACAGAGCCCTGCTGCAGCTGCAGTTTATGATGATGAAGA
CCTGGGGGCTTCTTGGCAACAGCACAGACCCAGCTGTGTTACAGACCTGGCATCCGT
CGACAACCTCCGAGTTTACGACAGCTGCTGAACCAGGGCATACTGTGGCCCCCACACAAC
TGAGCCCATGCTGATGGAGTACCCTGAGGCTATAACTCGCTAGTGACAGGGGCCAGAG
GCCCCCGACCCAGCTCCTGCTCCACTGGGGGCCCGGGGCTCCCAATGGCCTCCTTTC
AGGAGATGAAGACTTCTCCTCCATTGCGGACATGGACTTCTCAGCCCTGTGAGTCAGAT
CAGCTCCTAAGGGGGTGACGCTGCCCTCCCCAGAGCACTGGGTTGCAGGGGATTGAAGC
CCTCCAAAAGCACTTACGGATTCTGGTGGGGTGTGTTCCAACCTGCCCAACTTTGTGGA
TGTCTTCTTGGAGGGGGAGCCATATTTATTCTTTTATTGTAGTATCTGTATCTCTC
TCTCTTTTGGAGGTGCTTAAGCAGAAGCATTAACTTCTCTGAAAGGGGGGAGCTGGGG
AAACTCAAATTTTCCCCTGTCTGATGGTCAGCTCCCTTCTCTGTAGGGAACTCTGGGG
TCCCCCATCCCCATCCTCCAGCTTCTGGTACTCTCCTAGAGACAGAAGCAGGCTGGAGGT
AAGGCCTTTGAGCCACAAAAGCCTTATCAAGTGTCTTCCATCATGGATTACAGCTT
AATCAAATAACGCCCGAGATACCAGCCCTGTATGGCACTGGCATTGTCCCTGTGCCTA
ACACCAGCGTTTGGGGGCTGGCCTTCTGCCCTACAGAGGTCTCTGCCGGCTCTTTCCT
TGCTCAACCATGGCTGAAGGAAACCAAGTCAACAGCACTGGCTCTCTCCAGGATCCAGAA
GGGGTTTGGTCTGGGACTTCTTGGTCTCCTCTTCTCAAGTGCCTTAATAGTAGGGTAA
GTTGTTAAGAGTGGGGGAGAGCAGGCTGGCAGCTCTCCAGTCAGGAGGCATAGTTTTTAC
TGAACAATCAAAGCACTTGGACTCTTGTCTTTCTACTCTGAACTAATAAATCTGTTGCC
AAGCTGGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAACTCGAC
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_021975 unedited
 ATACGACTCACTATAGGGCGGCCGCAATTCGGCACGAGGCGCCCCGGGACCCCGGCCA
 TGGACGAACTGTTCCCTCATCTTCCCGGCAGAGCCAGCCAGGCTCTGGCCCTATG
 TGGAGATCATTGAGCAGCCCAAGCAGCGGGGCATGCGCTTCCGCTACAAGTGCGAGGGGC
 GCTCCGCGGGCAGCATCCCAGGCGAGAGGACACAGATACCACCAAGACCCACCCACCA
 TCAAGATCAATGGCTACACAGGACCAGGGACAGTGCATCTCCCTGGTACCAAGGACC
 CTCCTCACGGCCTCACCCACAGAGCTTGTAGGAAAGGACTGCCGGGATGGCTTCTATG
 AGGCTGAGCTCTGCCCGGACCGCTGCATCCACAGTTTCCAGAACCTGGGAATCCAGTGTG
 TGAAGAAGCGGGACCTGGAGCAGGCTATCAGTCAGCGCATCCAGACCAACAACAACCCCT
 TCCAAGTCTATAGAAGAGCAGCGTGGGGACTACGACCTGAATGCTGTGCGGCTCTGCT
 TCCAGGTGACAGTGCGGGACCCATCAGGACGGCCCTCCGCTGCCGCTGTCTTTCTC
 ATCCCATCTTTGACAATCGTGCCCAACACTGCCGAGCTCAAGATCTGCCGAGTGAACC
 GAAACTCTGGCAGCTGCCTCGGTGGAGATGAGATCTTCTACTGTGTGACAAGGTGCAGA
 AAGAGGACATTGANGGTATTTTACGGGACCAGGCTGGGAGGCCGAGGCTNCTTTTCG
 CAAGCTGATGTGCACCGACAGTGGCCATTGTGTTNCGGACCCCTCTACGCAACCCANN
 CTGCAGCTCTGTGCGTGTCTCATGCAGCTGCGGGGCCTTCGACCGGAGCTCATGAGCCA
 TGGATTNCACTACTGGCAGATCAAGAGATCGTNCCGGGATGAGGAGAACGTAAAGGACTA
 TGAGACCTCAGAGCTCATGAAAAAGTCTTCT

3' Read Nucleotide Sequence:

>OriGene 3' genomic read for NM_021975 unedited
 NTTTTTGGCAGCTATATTATTCAGATANAAGNACAGNATCCAGTCTTTGATTGTTTTCAG
 TAAAACTATGCCTCCTGACTGGAGAGTGCCAGCCTGCTCTCCCCACTCTTAACAACCT
 TACCCTACTATTAAGGCACTTGAGAAGAGGGAGAGCAAGGAAGTCCCAGACCAAACCCCT
 TCTGGATCCTGGAGAGAGCCAGTGTGTTGCACTGGTTTCTTTCAGCCATGGTTGAGCAA
 GGAAAGAGCCGGCAGAGACCTCTGTAGGGCAGGAAGGCCAGCCCTCAAACGCTGGTGT
 AGGCACAGGGACAATGCCAGTGCCATACAGGGGCTGGTATCTGGGGCGTTATTTTGATTA
 AGCTGTAATGAATCCATGATGGAAGACACTTGATAAGGCTTTGTGGGCTCAAAGGCTTA
 CCTCCAGCCTGCTTCTGTCTCTAGGAGAGTACCAGAAGCTGGAGGATGGGGATGGGGGAC
 CCCAGAGTTCCTACAGAGAAGGGAGCTGACCATCAGGACAGGGGAAAAGTTTGAGTTTC
 CCCAGCTCCCCCTTTCCAGAGAAGTTAATGCTTCTGCTTAAGCACCTCCAAAAAGAGAG
 AGAGATACAGATACTGACAATAAAAAGAATAAAATATGGCTCCCCCTCCAAGGAAGACAT
 CCACAAAGTTGGGGCAGTTGGAACACACCCACCAGAATCCGTAAGTGCTTTTGGAGGG
 CTTCAATCCCCTGCAACCCAGTGTCTGTTGGGAGGGCAGGCGTCACCNCTTAGAGCTGA
 TCTGACTCAGCAGGGCTGAGAAGTCCATGTCCGCAATGGAGGAGAAGTCTTCATCTNCTG
 AAAGGNAGCCATTGNNAGCCCCGGNGCCNCAGTGGNAGCAGAGCTGGGGTCGGGGGGC
 CTCTGGGGCCCTGTCACTANGCGAGTNTAGCN

Restriction Sites:

NotI-NotI

ACCN:

NM_021975

Insert Size:

2620 bp

OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info</p>
OTI Annotation:	<p>There is 1 nucleotide difference between the OriGene clone and the NCBI reference ORF. OriGene considers these to be polymorphisms and to reflect the natural differences between individuals. These result in the sub of 1 aa.</p>
Components:	<p>The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).</p>
Reconstitution Method:	<ol style="list-style-type: none"> 1. Centrifuge at 5,000xg for 5min. 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA. 3. Close the tube and incubate for 10 minutes at room temperature. 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom. 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	NM_021975.2 , NP_068810.2
RefSeq Size:	1760 bp
RefSeq ORF:	1656 bp
Locus ID:	5970
UniProt ID:	Q04206
Cytogenetics:	11q13.1
Domains:	RHD, IPT
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

Gene Summary:

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. [provided by RefSeq, Sep 2011]

Transcript Variant: This variant (1) represents the predominant transcript and encodes the longer isoform (1).