

Product datasheet for **RC229047**

NFKB1 (NM_001165412) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	NFKB1 (NM_001165412) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NFKB1
Synonyms:	CVID12; EBP-1; KBF1; NF-kappa-B1; NF-kappaB; NF-kappabeta; NF-kB; NF-kB1; NFkappaB; NFKB-p50; NFKB-p105
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC229047 representing NM_001165412
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCAGAAGATGATCCATATTTGGGAAGGCCTGAACAAATGTTTCATTTGGATCCTTCTTTGACTCATA
 CAATATTTAATCCAGAAGTATTTCAACCACAGATGGCACTGCCAACAGATGGCCCATACCTTCAAATATT
 AGAGCAACCTAAACAGAGAGGATTTTCGTTTCCGTTATGTATGTGAAGGCCATCCCATGGTGGACTACCT
 GGTGCCTCTAGTGAAGAACAAGAAGTCTTACCCTCAGGTCAAATCTGCAACTATGTGGGACCAGCAA
 AGGTTATTGTTCAAGTGGTCAAAATGGAAAAATATCCACCTGCATGCCACAGCCTGGTGGGAAAAACA
 CTGTGAGGATGGGATCTGCACTGTAAGTCTGGACCCAAGGACATGGTGGTGGCTTCGCAAACTGGGT
 ATACTTCATGTGACAAAGAAAAAGTATTTGAAACACTGGAAGCACAATGACAGAGGCGTGTAAAGGG
 GCTATAATCCTGGACTCTTGGTGCACCCTGACCTTGCTATTTGCAAGCAGAAGGTGGAGGGACCGGCA
 GCTGGGAGATCGGAAAAAGAGCTAATCCGCCAAGCAGCTCTGCAGCAGACCAAGGAGATGGACCTCAGC
 GTGGTGGCGCTCATGTTTACAGCTTTTCTTCCGGATAGCACTGGCAGCTTCAAGGCGCCTGGAACCCG
 TGGTATCAGACGCCATCTATGACAGTAAAGCCCCAATGCATCCAACCTGAAAATTTGAAGAATGGACAG
 GACAGCTGGATGTGTGACTGGAGGGGAGGAAATTTATCTTCTTTGTGACAAAAGTTCAGAAAGATGACATC
 CAGATTCGATTTTATGAAGAGGAAGAAAATGGTGGAGTCTGGGAAGGATTTGGAGATTTTCCCCACAG
 ATGTTTCATAGACAATTTGCCATTGTCTTCAAACCTCAAAGTATAAAGATATTAATTACAAAACCAGC
 CTCTGTGTTTGTCCAGCTTCGGAGGAAATCTGACTTGGAACTAGTGAACCAAACCTTTCTCTACTAT
 CCTGAAATCAAAGATAAAGAAGAAGTGCAGAGGAAACGTCAGAAGCTCATGCCAATTTTTCGGTAGTT
 TCGGCGGTGGTAGTGGTCTGGAGCTGGAGGGGAGGCATGTTTGGTAGTGGCGGTGGAGGAGGGGCAC
 TGGAAAGTACAGGTCCAGGTATAGCTTCCACACTATGGATTTCCCTACTTATGGTGGGATTAATTTCCAT
 CCTGGAACCTAAATCTAATGTGGGATGAAGCATGGAACCATGGACACTGAATCTAAAAAGGACCCTG
 AAGTTGTGACAAAAGTATGACAAAACACTGTAAACCTCTTTGGGAAAGTTATTGAAACCACAGAGCA
 AGATCAGGAGCCAGCGAGGCCACCGTTGGGAATGGTGGAGTCACTAACGTATGCAACAGGAACAAAA
 GAAGAGAGTGTGGAGTTCAGGATAACCTCTTTCTAGAGAAGGCTATGCAGCTTGCAAAGAGGCATGCCA
 ATGCCCTTTTCGACTACGCGGTGACAGGAGACGTGAAGATGCTGCTGGCCGTCCAGCGCCATCTCACTGC
 TGTGCAGGATGAGAATGGGGACAGTGTCTTACACTTAGCAATCATCCACCTTCATTCTCAACTTGTGAGG
 GATCTACTAGAAGTCACATCTGGTTTGATTTCTGATGACATTATCAACATGAGAAATGATCTGTACCAGA
 CGCCCTTGCACTTGGCAGTGATCACTAAGCAGGAAGATGTGGTGGAGGATTTGCTGAGGGCTGGGGCCGA
 CCTGAGCCTTCTGGACCGCTTGGTAACCTGTGTTTGCACCTAGCTGCCAAGAAGGACATGATAAAGTT
 CTCAGTATCTTACTCAAGCACA AAAAGGCAGCACTACTTCTTGACCACCCCAACGGGGACGGTCTGAATG
 CCATTCATCTAGCCATGATGAGCAATAGCTGCCATGTTTGTGCTGCTGGTGGCCGCTGGGGCTGACGT
 CAATGCTCAGGAGCAGAAGTCCGGGCGCACAGCACTGCACCTGGCTGTGGAGCAGCAACATCTCATTG
 GCAGGCTGCCTGCTCCTGGAGGGTATGCCATGTGGACAGTACTACCTACGATGGAACCAACCCCTGC
 ATATAGCAGCTGGGAGAGGGTCCACCAGGCTGGCAGCTCTTCTCAAAGCAGCAGGAGCAGATCCCCTGGT
 GGAGAACCTTTGAGCCTCTATGACCTGGATGACTCTTGGGAAAATGCAGGAGAGGATGAAGGAGTTGTG
 CCTGGAACCAACGCTCTAGATATGGCCACCAGCTGGCAGGTATTTGACATATTAATGGGAAACCATATG
 AGCCAGAGTTTACATCTGATGATTTACTAGCACAAAGGAGACATGAAACAGCTGGCTGAAGATGTGAAGCT
 GCAGCTGTATAAGTTACTAGAAATTCCTGATCCAGACAAAACTGGGCTACTCTGGCGCAGAAATAGGT
 CTGGGGTACTTAATAATGCCTTCCGGCTGAGTCTGCTCCTTCCAAAACACTTATGGACAACATGAGG
 TCTCTGGGGTACAGTACAGAGCTGGTGGAGGCCCTGAGACAAATGGGCTACACCGAAGCAATTGAAGT
 GATCCAGGCAGCCTCCAGCCAGTGAAGACCCTCTCAGGCCACTCGCTGCCTCTCTCGCTGCCTCC
 ACAAGGCAGCAAATAGACGAGCTCCGAGACAGTACAGTGTCTGCGACAGCGCGTGGAGACATCCTTCC
 GCAAACCTCAGCTTACCAGTCTCTGACCAGTGGTGCCTCACTGCTAACTCTCAACAAAAATGCCCATGA
 TTATGGGCAGGAAGGACCTCTAGAAGGCAAAT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC229047 representing NM_001165412
 Red=Cloning site Green=Tags(s)

MAEDDPYLGRPEQMFHLDPSLTHITFNPEVFQPQMALPTDGPYLQILEQPKQGRFRFRYVCEGSPHGGPL
 GASSEKNNKSYQVKICNYVGPVIVQLVTNGKNIHLHAHSLVGKHCEDGICTVITAGPKDMVVGFANLG
 ILHVTKKKVFETLEARMTEACIRGYNPGLLVHPDLAYLQAEAGGDRQLGDREKELIRQAALQOTKEMDLS
 VVRLMFTAFLPDSTGSFTRRLEPVVSDAIYDSKAPNASNLKIVRMDRTAGCVTGGEEIYLLCDKVQKDDI
 QIRFYEEEEENGGVWEGFDFSPTDVHRQFAIVFKTPKYKDINITKPASVVFQLRRKSDLETSEPKPFLYY
 PEIKDKKEEVQRKRQKLMPNFSDSFGGSGAGAGGGMFGSGGGGGTGSTGPGYSFPHYGFPTYGGITFH
 PGTTKSNAGMKHGTMDTESKKDPEGCDKSDDKNTVNLFGKVIETTEQDQEPSEATVGNGEVTLTYATGK
 EESAGVQDNLFLEKAMQLAKRHANALFDYAVTGDVKMLLAVQRHLTAVQDENGDSVLHLAIHLSQLVR
 DLLEVTSGLISDDIINMRNDLYQTPLHLAVITKQEDVVEDLLRAGADLSLLDRLGNSVLHLAAKEGHDKV
 LSILLKHKKAALLLDHPNGDGLNAIHLAMMSNLPCLLLLVAAGADVNAQEOKSGRTALHLAVEHDNISL
 AGCLLLEGDAHVDSTTYDGTPLHIAAGRGSTRLAALLKAAGADPLVENFEPLYDLDDSWENAGEDGCVV
 PGTTPLDMATSWQVFDILNGKPYEPEFTSDDLQAQDMKQLAEDVKLQLYKLEIPDPDKNWATLAQKLG
 LGILNNAFRLSPAPSKTLMNYEVSGGTVRELVEALRQMGYTEAIEVIQAASSPKTTSQAHSPLSPAS
 TRQQIDELRSDSVCDSGVETSFRKLSFTESLTS GASLLTLNKMPHDYGGQEPLEGKI

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja3705_a03.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

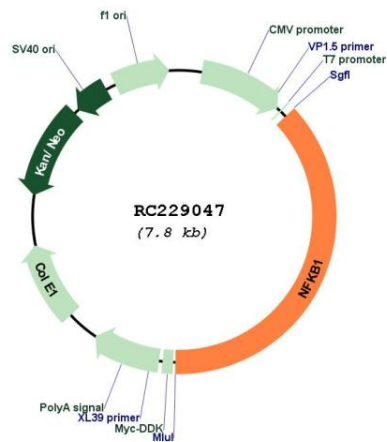
ACCN: NM_001165412

ORF Size: 2904 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>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</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_001165412.2
RefSeq Size:	4090 bp
RefSeq ORF:	2907 bp
Locus ID:	4790
UniProt ID:	P19838
Cytogenetics:	4q24
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, Metabolic pathways, 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
MW:	105.4 kDa

Gene Summary:

This gene encodes a 105 kD protein which can undergo cotranslational processing by the 26S proteasome to produce a 50 kD protein. The 105 kD protein 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. NFKB is a transcription regulator that is activated by various intra- and extra-cellular stimuli such as cytokines, oxidant-free radicals, ultraviolet irradiation, and bacterial or viral products. Activated NFKB translocates into the nucleus and stimulates the expression of genes involved in a wide variety of biological functions. Inappropriate activation of NFKB has been associated with a number of inflammatory diseases while persistent inhibition of NFKB leads to inappropriate immune cell development or delayed cell growth. NFKB is a critical regulator of the immediate-early response to viral infection. Alternative splicing results in multiple transcript variants encoding different isoforms, at least one of which is proteolytically processed. [provided by RefSeq, Aug 2020]

Product images:


Circular map for RC229047