

## Product datasheet for **SC127485**

### **NFKB1 (NM\_003998) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NFKB1 (NM_003998) Human Untagged Clone
Tag:	Tag Free
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:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_003998, the custom clone sequence may differ by one or more nucleotides

```

ATGGCAGAAGATGATCCATATTTGGGAAGGCCTGAACAAATGTTTCATTTGGATCCTTCTTTGACTCATA
CAATATTTAATCCAGAAGTATTTCAACCACAGATGGCACTGCCAACAGCAGATGGCCCATACCTTCAAAT
ATTAGAGCAACCTAAACAGAGAGGATTTCCGTTTCCGTTATGTATGTGAAGGCCCATCCCATGGTGGACTA
CCTGGTGCTCTAGTGAAAAGAACAAGAAGTCTTACCCTCAGGTCAAAATCTGCAACTATGTGGGACCAG
CAAAGTTATTGTTTCAGTTGGTCACAAATGGAAAAAATATCCACCTGCATGCCACAGCCTGGTGGGAAA
ACACTGTGAGGATGGGATCTGCACTGTAAGTCTGGACCAAGGACATGGTGGTCCGCTTCGAAACCTG
GGTATACTTCATGTGACAAAGAAAAAGTATTTGAAACACTGGAAGCACGAATGACAGAGGCGTGTATAA
GGGGCTATAATCCTGGACTCTTGGTGCACCCTGACCTGCCTATTTGCAAGCAGAAGGTGGAGGGGACCG
GCAGCTGGGAGATCGGAAAAAGAGCTAATCCGCCAAGCAGCTCTGCAGCAGACCAAGGAGATGGACCTC
AGCGTGGTCCGGCTCATGTTTACAGCTTTTCTCCGGATAGCACTGGCAGCTTACAAGGCGCTGGAAC
CCGTGGTATCAGACGCCATCTATGACAGTAAAGCCCCAATGCATCCAATTGAAAATTGTAAGAATGGA
CAGGACAGCTGGATGTGTGACTGGAGGGGAGGAAATTTATCTTCTTTGTGACAAAGTTGAGAAAGATGAC
ATCCAGATTCGATTTTATGAAGAGGAAGAAAATGGTGGAGTCTGGGAAGGATTTGGAGATTTTTCCCCCA
CAGATGTTTATAGACAATTTGCCATTGTCTTCAAACTCCAAAGTATAAAGATATTAATATTACAAAACC
AGCCTCTGTGTTTGTCCAGCTTCGGAGGAAATCTGACTTGGAAACTAGTGAACAAAACCTTTCTCTAC
TATCCTGAAATCAAAGATAAAGAAGAAGTGCAGAGGAAACGTGAGAGCTCATGCCCAATTTTTCGGATA
GTTTCGGCGGTGGTAGTGGTGTGGAGCTGGAGGCGGAGGCATGTTTGGTAGTGGCGGTGGAGGAGGGG
CACTGGAAGTACAGGTCAGGGTATAGCTTCCCACACTATGGATTTCTACTTATGGTGGGATTACTTTT
CATCCTGGAACTACTAAATCTAATGCTGGGATGAAGCATGGAACCATGGACACTGAATCTAAAAAGGACC
CTGAAGGTTGTGACAAAAGTGTGACAAAAACACTGTAACCTCTTTGGGAAAGTTATTGAAACACAGAG
GCAAGATCAGGAGCCAGCGAGGCCACCGTTGGGAATGGTGAAGTCACTTAACGTATGCAACAGGAACA
AAAGAAGAGAGTCTGGAGTTCAGGATAACCTCTTTCTAGAGAAGGCTATGCAGCTTGCAAAGAGGCATG
CCAATGCCCTTTTCGACTACGCGGTGACAGGAGACGTGAAGATGCTGCTGGCCGTCACGCGCCATCTCAC
TGCTGTGCAGGATGAGAATGGGGACAGTGTCTTACACTTAGCAATCATCCACCTTATTCTCAACTGTG
AGGGATCTACTAGAAGTCACATCTGGTTTGATTTCTGATGACATTATCAACATGAGAAATGATCTGTACC
AGACGCCCTTGCCTTGGCAGTATCACTAAGCAGGAAGATGTGGTGGAGGATTTGCTGAGGGCTGGGGC
CGACCTGAGCCTTCTGGACCGCTTGGGTAACCTGTTTTGCACCTAGCTGCCAAAGAAGGACATGATAAA
GTTCTCAGTATCTTACTCAAGCACAAAAAGGCAGCACTACTTCTTGACCACCCCAACGGGACGGTCTGA
ATGCCATTCATCTAGCCATGATGAGCAATAGCCTGCCATGTTTGTGCTGCTGGTGGCCGCTGGGGCTGA
CGTCAATGCTCAGGAGCAGAAGTCCGGGCGCACAGCACTGCACCTGGCTGTGGAGCACGACAACATCTCA
TTGGCAGGCTGCCTGCTCCTGGAGGGTGTATGCCCATGTGGACAGTACTACCTACGATGGAACACACCCC
TGCATATAGCAGCTGGGAGAGGGTCCACCAGGCTGGCAGCTCTTCTCAAAGCAGCAGGAGCAGATCCCCT
GGTGGAGAACTTTGAGCCTCTCTATGACCTGGATGACTCTTGGGAAAATGCAGGAGAGGATGAAGGAGTT
GTGCTTGGAAACACGCCCTCTAGATATGGCCACCAGCTGGCAGGATTTTGACATATTAATGGGAAACCAT
ATGAGCCAGAGTTTACATCTGATGATTTACTAGCACAAAGGAGACATGAAACAGCTGGCTGAAGATGTGAA
GCTGCAGCTGTATAAGTTACTAGAAAATCCTGATCCAGACAAAAACTGGGCTACTCTGGCGCAGAAATTA
GGTCTGGGGATACTTAATAATGCCTTCCGGCTGAGTCCTGCTCCTTCCAAAAACTTATGGACAACATATG
AGGTCTCTGGGGTACAGTACAGAGAGCTGGTGGAGGCCCTGAGACAAATGGGCTACACCGAAGCAATTGA
AGTGATCCAGGCAGCCTCCAGCCAGTGAAGACCACCTCTCAGGCCCACTCGCTGCCTCTCTCGCCTGCC
TCCACAAGGCAGCAAATAGACGAGCTCCGAGACAGTGACAGTGTCTGCGACAGCGGCGTGGAGACATCCT
TCCGCAAACTCAGCTTTACCGAGTCTCTGACCAGTGGTGCCTCACTGCTAACTCTCAACAAAATGCCCA
TGATTATGGGCAGGAAGGACCTCTAGAAGGCAAAATTTAG
    
```

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_003998 unedited  
 GCCGCGAATTCGGCACCAGCCGACGCCCTCGGCCTGCACGCAGCCACCGGCCCGCTCCC  
 GGAGCCCAGCGCCGCGAGGCGCGAGCCGCCCGGCCAGTAAGGCGGCGCCGCCCGCCGGC  
 CACCGCGCCCTGCGCTTCCCTCCGCCCGCGCTGCGGCCATGGCGCGGCGCTGACTGGC  
 CTGGCCCGGCCCGCCGCGCTCCCGCTCGCCCCGACCCGCACTCGGGCCCGCCCGGGCTC  
 CGGCTGCCGCGCCTCTTCTTCTCCAGCCGGCAGGCCCGCGCCGCTTAGGAGGGAGAG  
 CCCACCCGCGCCAGGAGCCGAACGCGGACTCGCCACCCGGCTTCAAGATGGCAGAAGAT  
 GATCCATATTTGGGAAGCCTGAACAAATGTTTCATTTGGATCCTTCTTTGACTCATACA  
 ATATTTAATCCAGAAGTATTTCAACCACAGATGGCACTGCCAACAGCAGATGGCCATAC  
 CTTCAAATATTAGAGCAACCTANACAGAGAGGATTTTCGTTTCCGTTATGTATGTGAAGGC  
 CCATCCCATGGTGGACTACCTGTTGCCTCTAGTAAAAGAACAAGAAGTCTTACCCTCAG  
 GTCAAAATCTGCAACTATGTGGGACCAGCAAAGTTATTGTTTCAAGTTGGGCACAAATGGA  
 AAAAATATCCACCTGCATGCCACAGCCTGGTGGGAAAACACTGTGAGGATGGGATCTGC  
 ACC

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_003998 unedited  
 GCTTGGCCGCGCCGCAATCTATATCGAGTTTTTTTTTTTTTTTTTTTTTTTGCAAATCAGAAT  
 AAATAACCACATTAGNAAAAAGCAATATGCCTTTTTTTTTTAAAATGGCACATCAAGTGAC  
 TCTCATTTTAAAATATCTCTTTTCTTAACCCTTAATTTGAATGCAAAATGATGCTGTGGT  
 CAGAAGGAATGCCAGGTGGCGACCGTGATACCTTTAATGACAATAGGAACGTAGCAGAGG  
 GACAACAGCAATGACAACAGAAAGCAGCTGTGATCCAGCAGCAGCTGGCAAAGCTTATTA  
 AGCAACCTCATCCCAGATGCATCCGCTCAGCCAGTGTGTGATTGCTAGATACTATCTG  
 TAAGTGAACCAAACTAAAATTCAATTTATGAACCAAGAAAGGAAGCCAAGTTGAAAAGGTC  
 TCGAGTTAAATCGAGAATGATTCAGGCGGGCCGGCTCTCTGAGCACCTTTGGATGCACTT  
 CTGCTTCTGTCTGTGGACAACGCAGTGGAAATTTACGGCTTTGGCTTACACCGTGTGGG  
 AAATTGTCAGCACGCTAAATCTTGCCTTCTAAAGTCTTCTGCCCTAATCATGGGCCA  
 TTCCGCTCCAAGTACCAGCGATGCCCACTGGCCATAAACTCCGCAAACCCCACTTCCG  
 GCAACGATCCTCCCCGAGCTTTACGCCAAACCTGTGAGTGAGACTCACCCCACTCTT  
 CCGCTGCCCTCCCCCACCACCGGATACAACCTAAATAGCCCCCGCCCCCGCTACA  
 TTTCCGTCAAGACACACCCCGCTCGGCCCGCCCGCGCCCTCGTTTTTTGATTGCC  
 CGTCTTCCCCCCTCCCCCTCGCATCTAACGCCCATCCCTCCCCCGCCTCTTCGCTGCC  
 CGGCCCTTCTCCCCCCCCCCCCGCCCGGATCTTCCCTGCTCATCTCTCGCCC  
 N

**Restriction Sites:**

ECoRI-NOT

**ACCN:**

NM\_003998

**Insert Size:**

3800 bp

**OTI Disclaimer:**

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](mailto:custsupport@origene.com) or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_003998.2</a> , <a href="#">NP_003989.2</a>
<b>RefSeq Size:</b>	4104 bp
<b>RefSeq ORF:</b>	2910 bp
<b>Locus ID:</b>	4790
<b>UniProt ID:</b>	<a href="#">P19838</a>
<b>Cytogenetics:</b>	4q24
<b>Domains:</b>	RHD, DEATH, ANK, IPT
<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, 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
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longest transcript and encodes the longer isoform (1). This isoform (1) may undergo proteolytic processing similar to that of isoform 2.</p>