

Product datasheet for **MC206386**

Nfkb2 (BC027423) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Nfkb2 (BC027423) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Nfkb2
Synonyms:	lyt, p49, p52, p50B, p49/p100, NF-kappaB2
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC027423
 GGCGGGCGTCCGAAACTCTGAAAGCTGAACCGGGGCCCGAAGCCGCAAGACACAGCAGGGCCTAGCCCA
 GAGATATGGACAATTGCTACGATCCAGGCCTGGATGGCATCCCCGAATATGATGATTTTGAATTCAGCCC
 CTCCATCGTGGAGCCTAAGGATCCAGCCCTGAGACAGCTGATGGCCCTATCTGGTGATTGTGGAACAG
 CCCAAACAGCGAGGCTTCAGATTTTCGATATGGCTGTGAAGGCCCTCCCATGGAGTTTCCAGGTGCCT
 CCAGTGAGAAGGGCCGGAAGACCTATCCTACTGTCAAGATCTGTAACATGAGGGACCGGCAAGATTGA
 GGTGGACCTGGTACACACAGTACCCACCTCGTGCCATGCCCCACAGTCTGGTGGGCAAGCAGTGTTC
 GAGTTGGGAGTGTGCGCTGTCTGTAGGACCCAAGGACATGACTGCTCAATTTAATAATCTGGGTGCC
 TGCATGTAACCAAGAAGAACATGATGGAGATTATGATCCAGAACTTCAGAGGCAGCGTCTCCGCTCCAA
 GCCTCAGGGCCTTACAGAGGCTGAGCGCGGGAGCTAGAGCAGGAGGCCAAGGAGCTGAAGAAAGTCATG
 GATCTGAGCATTGTACGGCTGCGCTTCTCAGCTTTCCTTCGAGCTAGCGATGGCTCCTTCTCCTTCCCC
 TGAAGCCTGTGATCTCCAGCCCATCCATGACAGCAAGTCTCCAGGGCCTCGAACCTGAAGATCTCCCG
 AATGGACAAGACAGCGGTTCCGTGCGCGGTGGAGACGAAGTTTATTTGCTCTGTGATAAGGTGCAAAAA
 GACGACATTGAGGTTTCGTTCTATGAGGATGATGAGAATGGATGGCAAGCCTTTGGGACTTCTCTCCA
 CAGACGTTATAAACAGTATGCCATTGTGTTCCGGACACCGCCCTATCACAAGATGAAGATCGAGAGGCC
 TGTAAACAGTGTCTGACGCTGAAACGCAAGCGTGGGGGCGATGTCTCGGACTCCAAACAGTTCACATAT
 TACCCTCTGGTGGAGACAAGGAGGAAGTGCAGAGGAAGCGGAGAAAGGCCCTGCCACCTTCTCCACAGC
 CCTTCGGGGGCGGATCCCACATGGGTGGAGTTCTGGGGCTCCGCTGGGGGTTATGGAGGCGCTGGAGG
 AGGTGGCAGCCTCGGCTTTTCTCCTCCTTGGCCTACAACCCTACCAATCCGGTGCAGCCCAATG
 GGCTGTTATCCGGGTGGGGGAGGTGGAGCGCAGATGGCCGTTCTAGACGGGACACCGATGCTGGCGAGG
 GGGCAGAGGAGCCAGGACGCCCCGGAGGCTCCCCAGGGCGAACACAGGCCCTTGACACTGCAGCG
 AGCTCGCGAGTACAACGCGCGCTGTTCCGTCTGGCGCAGCGCAGCGCCGAGCGTTGCTGGACTACGGC
 GTCACCCAGACGCGCGTCTCTGCTAGCGGGACAGCGCCACCTGCTGATGGCACAGGACGAGAGCGGAG
 ACACGCCACTGCACCTGGCCATCATCCATGGGCAGACTGGTGTCAATTGAGCAGATAGCCACGTCATTTA
 TACGCTCAGTACCTCGGCGTCACTCAACCTCACCAACCCTGCACCAGACGCTCTGCACCTGGCGGTA
 ATCACTGGGCAGACAAGGGTGGTGGAGCTTCTGCTGCAGGTGGTGCAGACCCACGCTGCTGGATCGGC
 ACGGAGACTCCGCCCTCCACTTGGCTCTCCGGCAGGTGCTGCAGCCCCAGAGCTGTTGCAGGCACTGTT
 GCGCAGCGGAGCCATGCTGTGCCCAAATATTGCACATGCCTGATTTTGAGGGACTATACCCTGTACAC
 CTGGCAGTCCATGCCGAAGCCCTGAGTGCCTGGATCTGTTAGTTGACTGTGGAGCTGAAGTGGAGGCC
 CAGAGAGGCAAGGGGGCCGAAGTGCCTGCATCTAGCCACAGAGATGGAGGAGTTGGGGCTGGTCACCCA
 TCTAGTACCAAGCTCCATGCTAATGTGAATGCCCGACCTTTGCTGGAACACACCCCTCCACCTGGCA
 GCTGGACTCGGGTCCCCAACTTACTCGCTCCTTCTAAAGGCTGGTGTGACATCCATGCAGAGAATG
 AGGAGCCTCTGTGCCGCTGCCCTCACCTCGACCTCTGGGAGCGACTCCGACTCTGAAGGGCCTGAGAG
 GGATACCCAAAGAACTCCGAGGCCATACCCCTCTTGACCTCACTTGCAGTACCAAGGTGAAGACTCTG
 CTGCTAAATGCTGCTCAGAACACCACGGAGCCACCCCTGGCCCCACCCAGCCCTGCAGGGCCAGGGCTGT
 CCCTGGGGGATGCAGCCCTGCAGAACCTGGAGCAACTGCTGGATGGTCCCGAAGCCAGGGCAGCTGGGC
 AGAGCTGGCAGAGCGACTGGGGTTGAGAAGCCTGGTGGACACATACAGGAAGACCCCGTCTCCACGGCC
 AGTCTCCTTCGTAGTTACAAGCTGGCTGGTGGGACTTGGTGGTCTATTGGAGGCCTTGTCTGACATGG
 GTCTCCATGAGGGAGTCAGGCTGCTGAAAGTCTGAGACCCGCGACAAGCTGCCACGACAGAGGTGAA
 AGAAGACAGTGCCTATGGGAGCCAGTCAAGTGGAGCAGGAGGACAGAGAAGCTGTGTCCACCCCTGAGCCT
 CAGGAGGGCTCTGCCACGGGCACCCCGCCTCAGGTGCACTGAATGGCCCCGTCAACTTCCACCCAG
 ATCCCTCTGTACAGCATCCCTGTCTAATCGAAATCTTATTTAAACCTCAAGCCACATCTCGGTGGGTCA
 AATAAAGGGGAAGACCCCTCCCCAACTTACGGTAAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI
ACCN: BC027423
Insert Size: 2700 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	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).
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:	BC027423 , AAH27423
RefSeq Size:	2918 bp
RefSeq ORF:	2700 bp
Locus ID:	18034
Cytogenetics:	19 38.8 cM

Gene Summary:

NF-kappa-B is a pleiotropic transcription factor present in almost all cell types and is the endpoint of a series of signal transduction events that are initiated by a vast array of stimuli related to many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NF-kappa-B is a homo- or heterodimeric complex formed by the Rel-like domain-containing proteins RELA/p65, RELB, NFKB1/p105, NFKB1/p50, REL and NFKB2/p52. The dimers bind at kappa-B sites in the DNA of their target genes and the individual dimers have distinct preferences for different kappa-B sites that they can bind with distinguishable affinity and specificity. Different dimer combinations act as transcriptional activators or repressors, respectively. NF-kappa-B is controlled by various mechanisms of post-translational modification and subcellular compartmentalization as well as by interactions with other cofactors or corepressors. NF-kappa-B complexes are held in the cytoplasm in an inactive state complexed with members of the NF-kappa-B inhibitor (I-kappa-B) family. In a conventional activation pathway, I-kappa-B is phosphorylated by I-kappa-B kinases (IKKs) in response to different activators, subsequently degraded thus liberating the active NF-kappa-B complex which translocates to the nucleus. In a non-canonical activation pathway, the MAP3K14-activated CHUK/IKKA homodimer phosphorylates NFKB2/p100 associated with RelB, inducing its proteolytic processing to NFKB2/p52 and the formation of NF-kappa-B RelB-p52 complexes. The NF-kappa-B heterodimeric RelB-p52 complex is a transcriptional activator. The NF-kappa-B p52-p52 homodimer is a transcriptional repressor. NFKB2 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p100 and generation of p52 by a cotranslational processing. The proteasome-mediated process ensures the production of both p52 and p100 and preserves their independent function. p52 binds to the kappa-B consensus sequence 5'-GGRNNYYCC-3', located in the enhancer region of genes involved in immune response and acute phase reactions. p52 and p100 are respectively the minor and major form; the processing of p100 being relatively poor. Isoform p49 is a subunit of the NF-kappa-B protein complex, which stimulates the HIV enhancer in synergy with p65 (By similarity). In concert with RELB, regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-ARNTL/BMAL1 heterodimer.[UniProtKB/Swiss-Prot Function]