

Product datasheet for **MC200064**

Rela (BC003818) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rela (BC003818) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Rela
Synonyms:	p65
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF: >BC003818
 CGACGACGGGCGCGCCGCGCATTTCGCCTCTGGCGAATGGCTTTACTTTAGCGCGCCGTGGGCTCAG
 CTGCGACCCCGGCCCGCCCGGGACCCTGACCATGGACGATCTGTTTCCCCTCATCTTCCCTCAGAG
 CCAGCCCAGGCTTCTGGGCTTATGTGGAGATCATCGAACAGCCGAAGCAACGGGGCATGCGATTCCGCT
 AATAATGCGAGGGGCGCTCAGCGGGCAGTATTCTGGCGAGAGAAGCACAGATACCACCAAGACACACC
 CACCATCAAGATCAATGGCTACACAGGACCAGGAACAGTTCGAATCTCCCTGGTCACCAAGGATCCACCT
 CACCGGCTCATCCACATGAACCTTGTGGGAAGGACTGCCGGGATGGCTACTATGAGGCTGACCTTGCC
 CAGACCGCAGTATCCATAGCTTCCAGAACCTGGGGATCCAGTGTGTAAGAAGCGAGACCTGGAGCAAGC
 CATTAGCCAGCGAATCCAGACCAACAATAACCCCTTTCACGTTTCTATAGAGGAGCAGCGCGGGACTAT
 GACTTGAATGCAGTGCGCCTCTGCTTCCAGGTGACAGTGCGGGACCCAGCAGGCAGGCCCCCTCTCTGA
 CCCCTGCTCTCACATCCGATTTTGTATAACCGGGCCCCAACACTGCCGAGCTCAAGATCTGCCGAGT
 AAACCGGAACTCTGGGAGCTGCCTCGGTGGGATGAGATCTTCTGCTGTGCGACAAGGTGCAGAAAAGA
 GACATTGAGGTGATTTACGGGACCAGGCTGGGAGGCACGAGGCTCCTTTTCTAAGCTGATGTGCATC
 GGCAAGTGGCCATTGTGTTCCGGACTCCTCGTACGCCGACCCAGCCTCCAGGCTCCTGTTTCGAGTCTC
 CATGCAGTACGGCGGCCTTCTGATCGCGAGCTCAGTGAAGCCATGGAGTTCAGTACTTCCAGACACA
 GATGATCGCCACCGGATTGAAGAGAAGCCAAAAGGACCTATGAGACCTCAAGAGTATCATGAAGAAGA
 GTCCTTTCAATGGACCAACTGAACCCCGGCCTCAACCCGGCGTATTGCTGTGCCTACCCGAAACTCAAC
 TTCTGTCCCAAGCCAGCCCGCAGCCCTACACCTTCCAGCATCCCTCAGCACCATCAACTTTGATGAG
 TTTTCCCCATGCTGTTACCATCAGGGCAGATCTCAAACAGGCCCTGGCCTTAGCACCGTCTCTGCC
 CAGTCTTGGCCAGACCATGGTCCCTTCTCAGCCATGGTACCTCTGGCTCAGCCCCAGTCTCTGCC
 AGTTCTAACCCGGGTCTCCCACTGCTGCTGACCTGTTCCAAAGAGCACCCAGGCTGGGGAAGGC
 ACGCTGTGGAAGCCCTGCTGCACCTGCAGTTTGTGATGATGAAGACTTGGGGCCTTGGTGGCAACA
 GCACAGACCCAGGAGTGTTCACAGACTGGCATCTGTGGACAACCTCAGAGTTTCAGCAGCTCCTGAACCA
 GGTGTGTCCATGTCTCACTCCACAGCTGAGCCATGCTGATGGAGTACCCTGAAGCTATAACTCGCTG
 GTGACAGGTCAGAGGCCCTGACCCAGCTCCACACCCCTGGGACCTCGGGCTTCCCAATGGTCT
 TCTCCGGAGATGAAGACTTCTCCTCATTGCGGACATGGACTTCTCTGCTTTTTGAGTCAGATCAGCTC
 CTAAGGTGCTGACAGCGACCCCTGCTCAGAGCACCAGGTTTCAGGGCACTGAAGCCTTCCCGAAGTGC
 CACATTCTGGGGAGTGTCTCCAGCTGCCCGGACTTGTGGGTGATCTCTCTGGGGCGGCACGTTTTA
 CTCTTTATCTCGTTTTCGGAGGTGCTTTCGAGGAGCATTAACTCCTGGAGACGGAGCTGGGAGGACTC
 GGTGCATCCCTGTGTTGATAGCTCCTGCTCGGTAGGAACTCTGAGATCCTGCTCCATCTCCAGTTC
 TAGCACTCTCTAGAGAGGGACAGACTGGAGCCATGGCCTTAGGCCATATAGCCTTACTATCAAGTGTCT
 TCCTCCACGGGATTCTGTACACCTTGTCCAAAGCAGTGTCCCAAGAGCAGCTCCTACGTGGTGTCTG
 CCCGACACCAGCAGATGAGGGGCGCTTCTGTCTGTGGAGCTCCTGCCCTGCCAGCTCTCCATGCTG
 AGCTGTGGCAAGGGGAACAGGTGGGATGTTGCTGGCCGCTTCCAGAATCAGGGGGAGTTTGTCTGAGA
 CATCCCTGCTCCCTTTTTTCAAGTGCCTTAATAGCAGGGCAAAGTGTAGAGTCAAGGGGAGGCTAG
 ATGCTCAGCCACAAGACAGCCTTACTGAAAAAGCTATTGGACTTTGCTCTTTCTAGCTCTGAACATAA
 AAATGTCTTATCACGCTGAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: RsrII-NotI

ACCN: BC003818

Insert Size: 1650 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:

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: [BC003818](#), [AAH03818](#)

RefSeq Size: 2497 bp

RefSeq ORF: 1650 bp

Locus ID: 19697

Cytogenetics: 19 4.34 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 heterodimeric RELA-NFKB1 complex appears to be most abundant one. 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. The NF-kappa-B heterodimeric RELA-NFKB1 and RELA-REL complexes, for instance, function as transcriptional activators. 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. The inhibitory effect of I-kappa-B on NF-kappa-B through retention in the cytoplasm is exerted primarily through the interaction with RELA. RELA shows a weak DNA-binding site which could contribute directly to DNA binding in the NF-kappa-B complex. Beside its activity as a direct transcriptional activator, it is also able to modulate promoters accessibility to transcription factors and thereby indirectly regulate gene expression (PubMed:29813070). Associates with chromatin at the NF-kappa-B promoter region via association with DDX1. Essential for cytokine gene expression in T-cells (By similarity). The NF-kappa-B homodimeric RELA-RELA complex appears to be involved in invasion-mediated activation of IL-8 expression (By similarity).[UniProtKB/Swiss-Prot Function]