

Product datasheet for **MG208842**

Relb (NM_009046) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Relb (NM_009046) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Relb
Synonyms:	shep
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG208842 representing NM_009046
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCCGAGTCGCCGCGCTGCCAGAGAGTCCGCGCCGAGCTAGGGGCCTTGGGTTCCAGTGACCTCTCTT
 CCCTGTCACTAACGGTCTCCAGGACCACAGATGAATTGGAAATCATCGACGAATACATTAAGGAGAACGG
 CTTTGGCCTGGACGGGACACAGCTGAGTGAGATGCCGCGCCTGGTGCCCCGCGGGCCCGCTCACTGAGC
 AGCGTCACGCTGGGCCCTGCTGCACCACCCTCCGCGCCACGCCCTCTGGAGCTGCACACTGGGCAGGC
 TGGTGTACCCCGCCCGTCCCACGGCCGTACCTGGTCATCACAGAGCAGCCAAAGCAGCGTGGCATGCG
 CTTCCGCTACGAGTGGAGGGCCGCTCGGCCGGCAGCATCCTCGGGGAGAGCAGCACCGAAGCCAGCAAG
 ACCCTGCCCGCCATCGAGCTTCGAGACTGTGGCGGGCTGCGGGAGGTGGAGGTGACGGCGTGCCTGGTGT
 GGAAGGACTGGCCACCCGGGTACCCACATAGCCTCGTGGGAAAGACTGCACGGACGGCGTCTGCAG
 GGTGCGGCTGCGCCTCACGTACGCCCCGGCACAGCTTTAAACCTGGGCATCCAGTGTGTTAGGAAG
 AAGGAAATGAAGCTGCCATTGAGCGGAAGATCCAGCTGGGAATTGACCCCTACAATGCTGGCTCCCTGA
 AGAACCATCAGGAGGTCGACATGAATGTCGTCAGGATCTGCTTCCAGGCCTCTATCGGGACCAGCAGGG
 ACATCTGCACCGCATGGACCCCATCCTCTCTGAGCCTGTCTACGACAAGAAGTCCACCAACACATCGGAG
 CTGCGGATTTGCCGAATCAACAAGGAGAGCGGGCCGTGCACAGGTGGTGAGGAGCTGACTTGCTCTGTG
 ACAAGGTGCAAAAAGAGGACATATCCGTGGTGTTCAGCACAGCTTCTGGGAAGGCCGTGCCGACTTCTC
 TCAAGCTGATGTGACCCGGCAGATCGCCATTGTGTTCAAACGCCACCCTACGAGGACCTGGAGATCTCA
 GAGCCCGTGACTGTCAATGTGTTCTTGCAGCGGCTCACGGATGGGGTGTGCAGCGAGCCGCTGCCCTCA
 CGTACCTGCCTCGGGATCATGACAGCTACGGTGTGGACAAGAAGCGAAAGCGGGGACTCGCTGATGTCCT
 TGGAGAGTTGAGCAGCTCTGATCCACATGGAATCGAGAGCAAACGAAGGAAAAAGAAACAGTGTCTTGTG
 GACCACTTCTGCCTGGCCACAGCTCAGGCCTGTTCTCCACCATCGGCTCTGCAGCCGCAGACTCTG
 ATTTCTTCCCTGCTTCCATATCCCTTCTGGGCTGGAGCCTCCTGGTGGACCCGATCTCCTGGACGATGG
 CTTTGCCTATGATCCTTCTGCCCCACGCTCTTCACTATGTTGGACTGTGCCCCAGCACCACCCTT
 GCCAGTGTGTGGTGGTAGCGGGGTGCAGGGGCCACCCTTGTGGAGTCTTCTGGCCAGAGCCCTAT
 CACTGGACTCTTTGCAGCGCCGGGCCCGGGGATGTTGGTACTGCTAGCCTTGTGGGCAGCAACATGTT
 TCCAACAGTACCGAGAGGCAGCTTTCGGGGTGGCCTCCTATCTCCAGGCCTGAAGCCAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG208842 representing NM_009046
 Red=Cloning site Green=Tags(s)

MPSRRAARESAPELGALGSSDLSLSTVSRRTTDELEIIDEYIKENGFGLDGTQLSEMPRLVPRGPASLS
 SVTLGPAAPPPATPSWSCTLGRLVSPGPCRPYLIVITEQPKQRMFRYECEGRSAGSILGESSTEASK
 TLPAILRDCGGLREVEVTAACLWVKDWPVRVPHSLVGKDCTDGVCVRVLRPHVSPRHSFNNLGIQCVRK
 KEIEAAIERKIQLGIDPYNAGSLKNHQEVDNVRICFQASYRDQQGHLHRMDPILSEPVYDKKSTNTSE
 LRICRINKESGPCTGGEELYLLCDKQVKEDISVVFSTASWEGRADFQADVHRQIAIVFKTPPYEDLEIS
 EPVTVNVFLQRLTDGVCSEPLPFTYLPRDHSYGVDKRKRGLPDVLELSSSDPHGIESKRRKKKPVFL
 DHFLPGHSSGLFLPPSALQPADSDFPASIPLGLEPPGGPDLLDDGFAYDPSAPTLFTMLDLLPPAPPL
 ASAVVSGGAGATVVESSGPEPLSLDSFAAPGPGDVGASLVGSNMFNPQYREAAFGGLLSPGPEAT

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_009046

ORF Size: 1674 bp

OTI Disclaimer: 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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: [NM_009046.2](#), [NP_033072.2](#)

RefSeq Size: 2218 bp

RefSeq ORF: 1677 bp

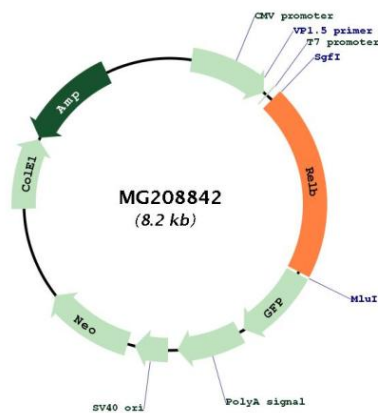
Locus ID: 19698

UniProt ID: [Q04863](#)

Cytogenetics: 7 9.93 cM

Gene Summary: NF-kappa-B is a pleiotropic transcription factor which is present in almost all cell types and is involved in 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. NF-kappa-B heterodimeric RelB-p50 and RelB-p52 complexes are transcriptional activators. RELB neither associates with DNA nor with RELA/p65 or REL. Stimulates promoter activity in the presence of NFKB2/p49 (By similarity). As a member of the NUPR1/RELB/IER3 survival pathway, may allow the development of pancreatic intraepithelial neoplasias. Regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-ARNTL/BMAL1 heterodimer in a CRY1/CRY2 independent manner. Increased repression of the heterodimer is seen in the presence of NFKB2/p52. Is required for both T and B lymphocyte maturation and function (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG208842