

Product datasheet for MR231574

Rbl2 (NM_001282000) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Rbl2 (NM_001282000) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Rbl2
Synonyms: p130; PRB2; Rb2; RBR-2
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR231574 representing NM_001282000
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCATCTGGAGGCAACCAGTCGCCACCGCCTCCTCCAGCTGCTGCAGCCAGCTCGGAGGAAGAGGAGG
 AGGATGGCGACGCCGCGGATCGCGCGCAGCCCGGGGTCCTCCGAGCCATCAGATCCAGCAGCGTTTCGA
 GGAGCTGTGCAGCCGCTCAACATGGACGAGCGCGCGCCGAGGCCGGAGCAGCTACCGCAGCATG
 AGCGAGAGCTACACGCTGGAGGAAATGACCTTCATTGGTTAGCATGTGCCTTATATGTGGCTTGCAGAA
 AATCTGTTCCAAGTGTGAGCAAAGGGACCGCTGAAGGAACTATGTATCTTTAACCAAGATCTCTCGCTG
 TTCGGAGCAGAGCCTAATTGAATTTTTAAACAAGATGAAGAAGTGGGAAGACATGGCAAATCTGCCCCCA
 CATTTCGAGAACGTAAGGATTAGAAAGAACTTCACTGTTTCTGCTGTGATTTTTAAGAAATATG
 AACCCATTTTTCAAGACATTTTTAAATATCCCCAAGAAGAACAGCCTCGCCAGCAAAGAGGAAGAAAACA
 GAGGCGACAGCCCTGTACCACATCAGAAATTTCCATTTTTGCTGGGTGCTTTTTATATATGCGAAAGGC
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 GCTCCTTACACGACGGTCTAGTGTGGAGGCCAAGGGGATAAAGGAACACTTCTGGAAACCTATATTAG
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 AGGTACAGAGAGTGTGAACGGACGCAGATGAGAGACATCTTGCAGCAGCATCTTGACAAGTCTAAAGCA
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 CCACAGCTGCACACAGCCTGAGCCGTCTTACACCATGCTGTCCGGCCTCAGGAATGCACCCAGTGAGAA
 GCTGGAGCGGATACTCAGGTGATGTTCCCGAGATCCAAGTATCGCTGACAGATTGAAAGAAATG
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 AACATTTTCGTTTTGCAGAAATGCTCTACTATAAAGTATTAGAGTCTGTTATTGAGCAAGAACAAAAAG
 ATGGGAGACATGGATTTATCTGGTGTCTGGAGCATGACGCATCCACAGGTCCTTGGCCTGCTGC



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CTTGAGGTGGTCGCTTTTTCCCATAGCCCTCTGGGAATTTCCATTTATTGCTGAAATATTTGATGTAC
CACATTATCATTTTTATAAGGTAATTGAAGTATTTATTAGAGCAGAAGACGGTCTTTGCAGAGAAGTGGT
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR231574 representing NM_001282000
Red=Cloning site Green=Tags(s)

MASGGNQSPPPPPAAAASSEEEEEEDGDAADRAQPAGSPSHQIQQRFEELCSRLNMDEAARAEAWSSYRSM
SESYTLEGNDLHWLACALYVACRKSVPVSKGTAEGNYVSLTRILRCSEQSLIEFFNKMKKWEDMANLPP
HFRERTERLERNFTVSAVIFKKEYEPIFQDIFKYPQEEQPRQRGRKRRQPCTTSEIFHCWVLFYIYAKG
LSEDCHPKDSKASDPPCVIEKLCSLHDGLVLEAKGIKEHFWKPYIRKLFKLLKGGKEENLTGFLEPGN
FGESFKAVNKAYEYVLAAGNLDERVFLGEDAEEVGTLSRCLSAASGTEAERTQMRDILQQHLDKSKA
LRVCTPLTGVRYVQENSPCVTPVSTAAHLSRLHTMLSGLRNAPSEKLERILRCSRDPQTQAIADRLKEM
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LEVVAFSHKPPGNPFIAEIFDVPYHYFYKIVIEVIRAEDGLCREVVKHLNQIEEQILDHLAWKTKSPLW
DRIRDNENRVPTCEEVMPQNLERDEIYIAGSPLTPRRVGEVRADAGGLGRSITSPTTLYDRYSSTVS
TTRRRLFENDSPSEGSTSGRIPPQPLVNAVVPQNVPGETVSVTPVPGQTLVTMATATVTANNGQVTIPV
QGIANENGGITFFPVQVNVGGQAQAVAGSIQPLSAQALAGSLSSQVVTGTLQVPGPVAIQQISPGGQQQ
NPGQPLTSSSIRPRKTSSLALFFRKVYYLAGVRLRDLCKLIDISELRRKIWTCFEFSIIQCTELMMDRH
LDQLLMCAIYVMKVTKEDRSFQNMRCYRTQPQARSQVYRSVLKGGKRRNSGSSSRSHQNSPTELNTD
RASRDSPPVMRSNSTLVPVQPSAPPTPTRLTGASSDVEEEERGLIQFYNNIYRQIQAFAMKYSQANA
QTDTPPLSPYPFVRTGSPRRVQLSQSHPIYISPHNNEAMPSPREKIFYFYFNSPSPKRLREINSMIRTGET
PTKKRGILLDDGSESPAKRICPENHSALLRRLQDVANDRGSQ

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001282000

ORF Size: 3276 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_001282000.1](#), [NP_001268929.1](#)

RefSeq Size: 4806 bp

RefSeq ORF: 3279 bp

Locus ID: 19651

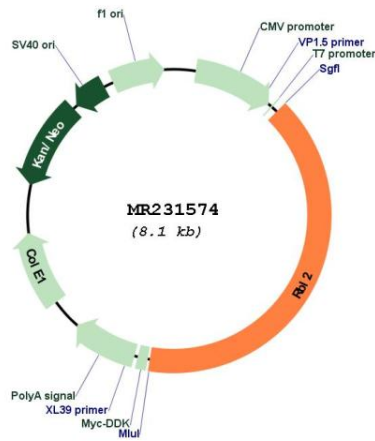
UniProt ID: [Q64700](#)

Cytogenetics: 8 44.25 cM

MW: 123.1 kDa

Gene Summary: Key regulator of entry into cell division. Directly involved in heterochromatin formation by maintaining overall chromatin structure and, in particular, that of constitutive heterochromatin by stabilizing histone methylation. Recruits and targets histone methyltransferases KMT5B and KMT5C, leading to epigenetic transcriptional repression. Controls histone H4 'Lys-20' trimethylation. Probably acts as a transcription repressor by recruiting chromatin-modifying enzymes to promoters. Potent inhibitor of E2F-mediated trans-activation, associates preferentially with E2F5. Binds to cyclins A and E. Binds to and may be involved in the transforming capacity of the adenovirus E1A protein. May act as a tumor suppressor.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR231574