OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC229393

Rbl2 (NM_001282001) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rbl2 (NM_001282001) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Rbl2
Synonyms:	p130; PRB2; Rb2; RBR-2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>MC229393 representing NM_001282001
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCATCTGGAGGCAACCAGTCGCCACCGCCTCCTCCAGCTGCTGCAGCCAGCTCGGAGGAAGAGGAGG
AGGATGGCGACGCCGCGGATCGCGCGCAGCCCGCGGGGTCCCCGAGCCATCAGATCCAGCAGCGGTTCGA
GGAGCTGTGCAGCCGCCTCAACATGGACGAGGCGGCGCGCGCCGAGGCCTGGAGCAGCTACCGCAGCATG
AGCGAGAGCTACACGCTGGAGGGAAATGACCTTCATTGGTTAGCATGTGCCTTATATGTGGCTTGCAGAA
AATCTGTTCCAACTGTGAGCAAAGGGACCGCTGAAGGAAACTATGTATCTTTAACCAGAATCCTTCGCTG
TTCGGAGCAGAGCCTAATTGAATTTTTTAACAAGATGAAGAAGTGGGAAGACATGGCAAATCTGCCCCCA
CATTTCCGAGAACGTACTGAAAGATTAGAAAGAAACTTCACTGTTTCTGCTGTGATTTTTAAGAAATATG
AACCCATTTTTCAAGACATTTTTAAATATCCCCAAGAAGAACAGCCTCGCCAGCAAAGAGGAAGAAAACA
GAGGCGACAGCCCTGTACCACATCAGAAATTTTCCATTTTTGCTGGGTGCTTTTTATATATGCGAAAGGG
AACTTCCCCATGATTAGCGATGATCTGGTCAATTCCTACCATCTTCTGCTGTGCGCATTAGATTTAGTCT
ATGGAAATGCCCTTCAGTGTTCTAACCGTAAAGAACTTGTGAACCCTAATTTTAAAGGCCTGTCCGAGGA
CTGTCACCCCAAGGACTCTAAAGCGTCCTCCGACCCGCCGTGTGTCATTGAGAAGCTGTGCTCCTTACAC
GACGGTCTAGTGTTGGAGGCCAAGGGGATAAAGGAACACTTCTGGAAACCCTATATTAGGAAACTGTTTG
AGAAAAAGCTTCTCAAGGGGAAGGAAGAAAATCTTACTGGCTTCCTGGAGCCCGGAAACTTTGGAGAGAG
TTTTAAGGCCGTTAATAAGGCATATGAAGAATACGTGTTAGCCGCTGGGAATCTGGATGAGCGCGTATTC
CTTGGTGAGGATGCTGAGGAGGAAGTTGGGACTCTGTCTCGGTGTCTAAGTGCTGCCTCAGGTACAGAGA
GTGCTGAACGGACGCAGATGAGAGACATCTTGCAGCAGCATCTTGACAAGTCTAAAGCACTTAGAGTCTG
CACACCACTGACTGGCGTGAGGTATGTTCAGGAGAACAGCCCGTGTGTGACTCCCGTCTCCACAGCTGCA
CACAGCCTGAGCCGTCTTCACACCATGCTGTCCGGCCTCAGGAATGCACCCAGTGAGAAGCTGGAGCGGA
TACTCAGGTCATGTTCCCGAGATCCAACTCAGGCTATCGCTGACAGATTGAAAGAAATGTACGAAATATA
TTCTCAGCATTTCCAGCCAGATGAGAATTTTAGTAATTGTGCTAAAGAAATGCTCTACTATAAAGTATTA

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GAGTCTGTTATTGAGCAAGAACAAAAAAGATTGGGAGACATGGATTTATCTGGTGTTCTGGAGCATGACG
CATTCCACAGGTCACTCTTGGCCTGCTGCCTTGAGGTGGTCGCTTTTTCCCATAAGCCTCCTGGGAATTT
TCCATTTATTGCTGAAATATTTGATGTACCACATTATCATTTTTATAAGGTAATTGAAGTATTTATTAGA
GCAGAAGACGGTCTTTGCAGAGAAGTGGTCAAACACCTCAATCAGATTGAAGAACAAATTTTAGACCATT
TGGCATGGAAAACCAAGTCCCCACTGTGGGACAGAATTAGAGATAATGAAAACAGAGTCCCTACTTGTGA
AGAGGTCATGCCACCTCAAAACCTAGAGAGAACAGATGAAATTTACATCGCTGGCTCTCCCTTAACCCCG
AGAAGGGTGGGTGAAGTTCGTGCTGATGCTGGAGGACTTGGAAGAAGTATAACGTCTCCAACCACATTGT
ATGACAGGTACAGCTCCCCAACAGTCAGCACTACTAGAAGGCGGCTATTCGAGAATGATAGTCCCTCTGA
AGGAAGCACATCTGGGCGCATCCCCCCACAACCCCTAGTCAACGCTGTCCCCGTGCAGAATGTACCTGGG
GAGACTGTTTCTGTCACACCAGTTCCTGGACAGACCTTGGTCACCATGGCAACAGCCACTGTCACGGCCA
ACAATGGACAAACAGTGACCATTCCAGTCCAAGGTATTGCCAACGAAAATGGAGGGATAACCTTCTTCCC
AGTCCAAGTCAACGTTGGGGGCCAGGCCCAGGCTGTCGCTGGCTCTATCCAGCCCCTCAGTGCTCAAGCA
CTGGCTGGAAGTCTGAGTTCCCAACAGGTGACAGGAACCACTTTGCAAGTCCCTGGTCCGGTGGCCATTC
AACAGATTTCCCCTGGTGGACAACAGCAGAACCCAGGCCAGCCACTAACCAGCAGCAGTATCCGGCCGCG
GAAGACTAGCTCCTTAGCGCTCTTCTTTAGAAAGGTTTACTACTTAGCCGGTGTCCGCCTTCGAGATCTT
TGTATAAAACTAGATATTTCAGATGAACTGAGGAAAAAAATTTGGACCTGCTTTGAATTCTCTATAATCC
AGTGCACCGAACTTATGATGGACAGACATCTGGACCAGCTGTTGATGTGTGCCATTTATGTGATGGCAAA
GGTCACAAAAGAAGACAGGTCCTTCCAGAACATCATGCGTTGTTACAGAACTCAGCCACAGGCCCGGAGC
CAGGTGTACAGAAGTGTCTTGATAAAAGGGAAAAGAAGAAACTCTGGCAGCAGTGAGAGCAGAAGCCATC
AGAATTCTCCAACCGAACTAAATACAGACAGAGCCAGTAGAGATTCCAGCCCAGTGATGAGGTCAAACAG
CACCCTACCAGTTCCACAGCCCAGCAGTGCCCCTCCTACACCAACTCGACTCACGGGTGCCAGCAGTGAC
GTTGAAGAGGAGGAACGAGGAGACCTCATTCAGTTCTACAACAACATCTATAGGAAGCAAATCCAAGCGT
TTGCCATGAAGTACTCGCAGGCAAACGCGCAGACGGACACTCCTCCCCTCTCTCCCTATCCATTTGTAAG
AACAGGCTCCCCTCGCCGAGTACAGTTATCTCAAAGTCATCCTATCTACATTTCCCCACATAACAACGAA
GCAATGCCTTCTCCTCGAGAGAAGATTTTTTACTACTTCAGCAACAGCCCATCAAAGAGACTGAGGGAAA
TCAACAGTATGATACGGACAGGAGAGACTCCAACTAAAAAGAGAGGGATTCTCTTGGACGACGGAAGTGA
ATCACCTGCAAAAAGAATCTGCCCAGAGAATCACTCTGCTCTGTTACGTCGTCTCCAGGATGTGGCGAAT
GACCGAGGTTCACAGTGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-MluI

ACCN: NM_001282001

Insert Size: 3378 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).

OTI Annotation: Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.

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_001282001.1, NP_001268930.1
RefSeq Size:	4905 bp
RefSeq ORF:	3378 bp
Locus ID:	19651
UniProt ID:	Q64700
Cytogenetics:	8 44.25 cM
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] Transcript Variant: This variant (3) uses an alternate in-frame splice site in the central coding region, compared to variant 1. The encoded isoform (3) is shorter, compared to isoform 1.