

Product datasheet for **RR217325**

Rb1 (NM_017045) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Rb1 (NM_017045) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Rb1
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide Sequence:

>RR217325 representing NM_017045
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**C

ATGCCGCCAAAGCCCCGCGCAGAACCAGCGCCGCGGAGCCCCGCGCCGCCGCCCTCCGGAGG
 ACGACCCCGCGCAGGACAGTGACCCGAAGAGCTGCCCTGATCAGGCTTGAGTTTGAAAAAATTGAAGA
 ACCTGAATTTATTGCATTATGTCAGAAGTTAAAGGTGCCGATCATGTCAGAGAGAGAGCTTGGCTAACG
 TGGGAGAAAGTTTCATCTGTGGATGGAATCCTGGAAGGATATATTCAGAAGAAGAAGAACTCTGGGGCA
 TCTGCATCTTCATTGCAGCAGTTGACCTGGATGAGATGCCATTCACTTTTACTGAGCTTCAGAAAAGCAT
 AGAAACCAGTGTCTATAAATCTTTGACTTATTAAGAAATGATACCAGTACCAAAGTTGATAATGCT
 GTGTCAAGGCTATTGAAGAAGTACAATGTGTTATGTGCACTCTACAGCAAATTAGAACGGACATGTGGAC
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 CAGCTGCAACACCCATTAATGGTTCACCTCGGACACCCAGAAGAGGTGAGAACAGGAGTGTCTGGATAGC
 AAAACAAC TAGAAAGTGATACAAGAACTATTGAAGTTCTCTGTAAGGAGCACGAGTGAATGTAGATGAG
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 GAGAAGTTTGCTAGCGCTGTGGGCAGGGATGATTGACATTGGAGCACAGCGATATAAACTTGGGGTTC
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 CAAACTCCTAAATGACAACATCTTTTATATGCTTTTATTGGCCTGTGCTTTGAAGTTGTAATGGCTACA
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 CAGAAGCCATTGAAATCTACCTCCCTTTCCCTGTTTTACAAAAAGTGTACCGTCTAGCATATCTCCGAC
 TAAATACACTGTGTGCGCGCCTTCTGTCTGACCACCCAGAGCCAGAACACATCATCTGGACTCTGTTTCA
 GCATACATTGGAAAAATGAGTATGAGTCAATGAAAGACCGACATTTGGACCAGATTATGATGTGTTCTATG
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAAGTTTAA

Protein Sequence: >RR217325 representing NM_017045
 Red=Cloning site Green=Tags(s)

MPPKAPRRRTAAAEPPPPPPPPEDDPAQDSDPEELPLIRLEFEKIEEPEFIALCQKLVDPDHRERAWLT
 WEKVSSVDGILEGYIQKKELWGCIFIAAVLDDEMPFTTELQKSIETSVYKFDLLKEIDTSTKVDNA
 VSRLKKYVNLICALYSKLERTCGLIYLTPSSGLSTEINSMVLKVSWITFLLAKGEVVQMEDDLVISFQ
 LMLCVLDYFIKLSPPALLREPYKTAATPINGSRPTPRRGQNRSARIAKQLES DTRTIEVLCKEHECNVDE
 VKNVYFKNFIPFISSGLIVSSNGLPELESLSKRYEEVYLKSKDLARLFLDHDKTLQTDTIDSFETERTP
 RKSNDPEEANMVTPTPTVMTIQQLMVILNSASDQPSENLISYFSNCTVNPKENILKRVKDVGHIFK
 EKFAVAVGQGCIDIGAQRKLVRLYYRVMESMLKSEEERLSIQNFSKLLNDNIFHMSLLACALEVVMAT
 YSRMLQNLDSGTDLSFPWILNVLNLKAFDFYKVIKVEANLTREMIKHLERCEHRIMESLAWLSDS
 PLFDLIKQSKDGEQPDHLESACSLSLPLQSNHTAADMYLSPIRSPKRTSTTRVNSAANTETAASAFHT
 QKPLKSTSLSLFYKVVYRLAYLRLNLCARLLSDHPEPEHIWTLFQHTLENEYELMKDRHLDQIMMCSM
 YGICKVKNIDLKFKIIVTAYKDLPHAAQETFKRVLIREEEFDSIIVFYNSVFMQRLKTNILQYASTRPPT
 LSPHIPRSPYKFSSSPLRIPGGNIYMSPLKSPYKISEGLPTPTKMTPRSRLVSIIGESFGTSEKFQKI
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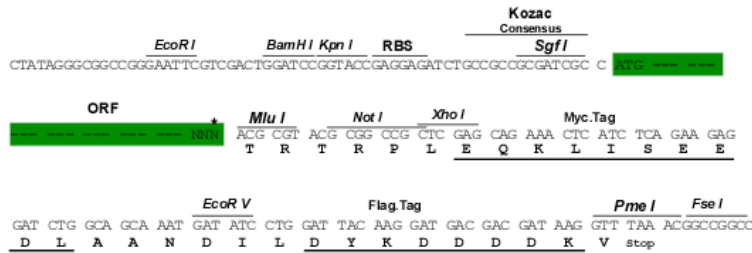
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

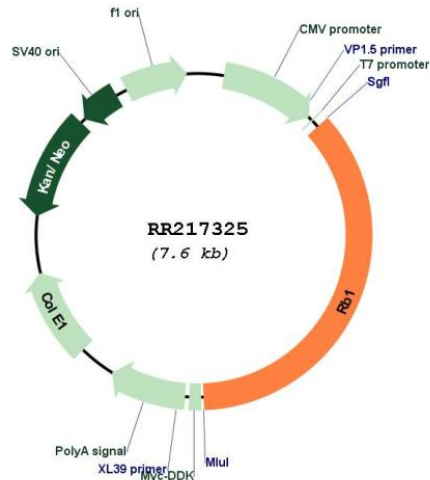
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_017045

ORF Size: 2760 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_017045.1](#), [NP_058741.1](#)

RefSeq Size: 4711 bp

RefSeq ORF: 2763 bp

Locus ID: 24708

UniProt ID: [P33568](#)

Cytogenetics: 15q11

MW: 105 kDa

Gene Summary: plays a role in negative regulation of the cell cycle and of DNA replication; acts as a tumor suppressor [RGD, Feb 2006]