

Product datasheet for **RG207017**

p107 (RBL1) (NM_183404) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p107 (RBL1) (NM_183404) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	p107
Synonyms:	CP107; p107; PRB1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG207017 representing NM_183404 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTTCGAGGACAAGCCCCACGCTGAGGGGGCGGCGGTGGTCGCCGACGCCGGGAGGGCTACAGGCC
TGTGCCAGGAGCTGAACCTGGACGAGGGGAGCGCGCCGAAGCCCTGGACGACTTTACTGCCATCCGAGG
CAACTACAGCCTAGAGGGAGAAGTTACACACTGGTTGGCATGTTTCATTATATGTTGCATGCCGAAAAGC
ATTATCCACGGTTGAAAAGGGTATCATGGAAGCAACTGTGTTTCACTTACCAGAATACTACGTTTCAG
CTAAATTAAGTTAATACAATTTTTAGTAAAATGAAGAAATGGATGGACATGTCAAATCTACCACAAGA
ATTCGTAACGTATAGAAAGGCTAGAGAGAAATTTGAGGTGTCTACTGTAATATTCAAAAATATGAG
CCAATTTTTTAGATATATTTCAAATCCATATGAAGAACCACCAAAGTTACCACGAAGCCGGAAGCAGA
GGAGGATTCCTTGCAGTGTAAAGGATCTGTTAATTTCTGTTGGACACTTTTGTATACTAAGGGTAA
TTTTCGGATGATTGGGGATGACTTAGTAACTCTTATCATTACTTCTATGCTGCTTGGATCTGATTTTT
GCCAATGCGATTATGTGCCAAATAGACAAGACTTGCTAAATCCATCATTTAAAGGTTTACCATCTGATT
TTCATACTGCTGACTTTACGGCTTCTGAAGAGCCACCCGTCATCATTGCTGTACTGTGTAAGTGCATGA
TGGACTTCTCGTAGAAGCAAAAGGAATAAAGGAGCACTACTTTAAGCCATATATTTCAAACCTCTTTGAC
AGGAAGATATTAAGGAGAATGCCTCCTGGACCTTTCAAGTTTTACTGATAATAGCAAAGCAGTGAATA
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GTGGAGTATAACCTTCAACAGCACTTTGAAAAAAAAGGTCATTTGCACCTTCTACCCCACTGACCGGAC
GGAGATATTTACGAGAAAAAGAAGCAGTCACTACTCCTGTTGCATCAGCCACCAAAAGTGTGAGCCGGTT
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GTATTATAAAATACTAGAGACTGTAATGGTTCAGGAAACAGAACTTCATGGAATGGACATGTCAGTT



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CTTTTAGAGCAAGATATATTTTCATCGTTCTTGATGGCTTGTGTTTGGAAATTGTGCTCTTGCCTATA
 GCTCACCTCGTACTTTTCCTTGGATTATTGAAGTTCTCAACTTGAACCATTTTACTTTTATAAGGTTAT
 TGAGGTGGTGATCCGCTCAGAAGAGGGGCTCTCAAGGGACATGGTGAAACACCTAAACAGCATTGAAGAA
 CAGATTTTGGAGAGTTTAGCATGGAGTCACGATTCTGCACTGTGGGAGGCTCTCCAGGTTTCTGCAACA
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 GGAGTGTAAAGAGAAGACTCTTTGGAGAGGACCCCCAAAGGAAATGCTTATGGACAAGATCATAACAGA
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 GCACAAGAGGTACATTCAACTGGAATAACAGGCCAAAGAGAAGTGGTCTTAGCACTATTTTACAGAA
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 GATGCTACAAAAACCTGACTGTTCCAGTGGACCAGTGAAGAGGAAAGAGGTGATCTTATAAAATTTT
 ACAATACAATATATGTAGGAAGAGTGAAGTCATTTGCACTGAAATACGACTTGGCGAATCAGGACCATAT
 GATGGATGCTCCACCCTCTCCTTTTCCACATTAACAACAGCCAGGCTCACCACGCCGATTTTCC
 CAGCAGCACTCCATTTATATTTCCCGCACAAGAATGGGTGAGCCTTACACCAAGAAGCGCTCTGCTGT
 ACAAGTCAATGGCAGCCCTTCTAAGGTAAGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG207017 representing NM_183404
 Red=Cloning site Green=Tags(s)

MFEDKPHAEGAAVVAAAGEALQALCQELNLDEGSAAEALDDFTAIRGNYSLEGEVTHWLACSLYVACRKS
 IIPTVGKGIMEGNCVSLTRILRSAKLSLIQFFSKMKKWMDSNLQEFRERIERLERNFEVSTVIFKKYE
 PIFLDIFQNPYEPPKLRSRKQRRIPCSVKDLFNF CWTLFVYTKGNFRMIGDDL VNSYHLLL CCLDLIF
 ANAIMCPNRQDLLNPSFKGLPSDFHTADFTASEEPPCIIAVLCELHDGLLVEAKGIKEHYFKPYISKLFD
 RKILKGECLLDLSSFTDNSKAVNKEYEYEVLTVDGDFERIFLGADAEIEIGTPRKFRDTPGLKTAQAN
 VEYNLQQHFEEKRSFAPSTPLTGRRYLREKEAVITPVASATQSVSRLQSI VAGLKNAPSDQLINIFESCV
 RNPVENIMKILKIGETFQHYTQSTDEQPGSHIDFAVNRLKLAELIYKILETVMVQETRRRLHGMDSV
 LLEQDIFHRSLMACCLEIVLFAYSSPRTFPWIIEVLNLQPFYFYKIEVIRSEEGLSRDMVKHLNIEE
 QILESLAWSHDSALWEALQVSANKVPTCEEVIFPNNFETGNGGNVQGHLPMPMSPLMHPRVKEVRTDSG
 SLRRDMQPLSPISVHERYSSPTAGSAKRRLFGEDPPKEMLMDKIITEGTLKIAPSSSITAEVNSILPGQ
 TLLTMATAPVTGTTGHKVTIPLHGVANDAGEITLIPLSMNTNQESKVKSPVSLTAHSLIGASPKQNTLTK
 AQEVHSTGINRPKRTGSLALFYRKVYHLASVRLRDLCLKLDVSNELRRKIWTCFEFTLVHCPDLMKDRHL
 DQLLLCAFYIMAKVTKEERTFQEIMKSYRNQPQANSHVYRSVLLKSI PREVVAYNKNINDDFEMIDCDLE
 DATKTPDCSSGPVKEERGDLIKFYNTIYVGRVKSFAKYDLANQDHMMDAPPLSPFPHIKQQPGSPRRIS
 QQHSIYISPHKNGSGLTPRSALLYKFNGSPSKVR

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:



ACCN: NM_183404

ORF Size: 3042 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.

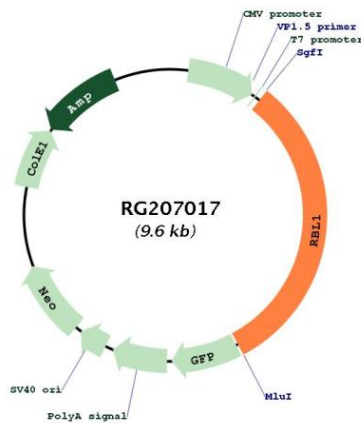
RefSeq: [NM_183404.4](#)

RefSeq Size: 3371 bp

RefSeq ORF:	3045 bp
Locus ID:	5933
UniProt ID:	P28749
Cytogenetics:	20q11.23
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Cell cycle, TGF-beta signaling pathway
Gene Summary:	

The protein encoded by this gene is similar in sequence and possibly function to the product of the retinoblastoma 1 (RB1) gene. The RB1 gene product is a tumor suppressor protein that appears to be involved in cell cycle regulation, as it is phosphorylated in the S to M phase transition and is dephosphorylated in the G1 phase of the cell cycle. Both the RB1 protein and the product of this gene can form a complex with adenovirus E1A protein and SV40 large T-antigen, with the SV40 large T-antigen binding only to the unphosphorylated form of each protein. In addition, both proteins can inhibit the transcription of cell cycle genes containing E2F binding sites in their promoters. Due to the sequence and biochemical similarities with the RB1 protein, it is thought that the protein encoded by this gene may also be a tumor suppressor. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG207017