

Product datasheet for SC109714

p107 (RBL1) (NM_002895) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	p107 (RBL1) (NM_002895) Human Untagged Clone
Tag:	Tag Free
Symbol:	p107
Synonyms:	CP107; p107; PRB1
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC109714 sequence for NM_002895 edited (data generated by NextGen Sequencing)

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ATGTTTCGAGGACAAGCCCCACGCTGAGGGGGCGGCGGTGGTCGCCGACGCGGGGAGGCG
CTACAGGCCCTGTGCCAGGAGCTGAACCTGGACGAGGGGAGCGCGCCGAAGCCCTGGAC
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CGTATAGAAAGGCTAGAGAGAAATTTTGAGGTGTCTACTGTAATATTCAAAAATATGAG
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TTGATGGCTTGTGTTTGGAAATTGTGCTCTTGCCTATAGCTCACCTCGTACTTTTCT
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 ATCCGCTCAGAAGAGGGGCTCTCAAGGGACATGGTGAAACACCTAAACAGCATTGAAGAA
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 GCTCTGCTGTACAAGTTCAATGGCAGCCCTTCTAAGAGTTTAAAAGATATCAACAACATG
 ATAAGGCAAGGTGAGCAGAGAACCAAGAAGCGAGTAATAGCCATCGATAGTGTGAGAA
 TCCCTGCCAACCGCTGTGCAAGAAATGATGACGTTTTACTGAAACGACTACAGGAT
 GTTGTGAGTGAAGAGCAATCATTAA

Clone variation with respect to NM_002895.2

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002895 unedited
 CGGCCGGAATTCGGCACGAGAAGTCGGGGCCGTGGCGCGCAGCCCGGGGCTGAAG
 GGATGTTGAGGACAAGCCACGCTGAGGGGGCGGCGGTGTCGCCGAGCCGGGGAGG
 CGCTACAGGCCCTGTGCCAGGAGCTGAACCTGGACGAGGGGAGCGGCCGAAGCCCTGG
 ACGACTTACTGCCATCCGAGGCAACTACAGCCTAGAGGGAGAAGTTACACACTGGTTGG
 CATGTTTATTATGTTGCATGCCGAAAAGCATTATTTCCACGTTTGGAAAGGGTATCA
 TGGAAAGCAACTGTGTTTCACTTACCAGAATACTACGTTTCACTAAATTAAGTTTAAATC
 AATTTTTTAGTAAAATGAAGAAATGGATGGACATGTCAAATCTACCACAAGAATTTGCTG
 AACGTATAGAAAGGCTAGAGAGAAATTTGAGGTGTCTACTGTAATTTCAAAAAATATG
 AGCCAATTTTTTAGATATTTTCAAAATCCATATGAAGAACCACCAAAGTTACCACGAA
 GCCGGAAGCAGAGGAGGATTCCTTGCAGGGTTAAGGATCTGTTTAAATTTCTGGTGGACAC
 TTTTGGTTATACTAAGGGTAATTTTCGGATGATTGGGGATGACTTAGTAAACTCTTATC
 ATTTACTTCTATGCTGGCTGGATCTGAATTTTGCAGATGCGATTATGTGCCCAATAGACA
 AGACTTGCTAATTCATCATTAN

3' Read Nucleotide Sequence:	>OriGene 3' read for NM_002895 unedited CGCCCAATACGGTGTGCACACGCCCAATTTTCGAGGATCNATTTTTCCCTTTTTTTTTTTTT TCCAATCCTTTTTTATAGCCTTCTAGTACTTGAACCAATCCTGAAAACCTGAAAAACTGT CCAGAATCTTTTTTCTTTTTCTGAAAAGGTCTTGCCTCTCACCTAGGATGGAGTGT AGTGGTCAATCACAGCTCACTGCAGCCTCAAAATCTCCAGTCTCAAGTATCCTCTCA TGTCAGTCTCCTGAGTAGCTGGGACTACAGGCACATGCCATCACACCCAACTAATTTTT TATTTTTGTAAAGATGAGGGCTATGTTGCCAGGTTAGTCTTGAACCTCGGACTGAAG CAATCCTCCTGCCTCAGCCTCCCAAAGTGTGGATTATAGGCATGAGCCACAGGACCTG GCCCATGTTTTCTTATACAGTCAATGTACAAATGCTCATTATATTTTTGCACAATAATGA AGATAAAAATAACAATTATAGCAACATACAAATATGTACAAAGATTCCAGACAGACTTTG TTTTTTGGCTTATAACAATGTGTAGATACTACACAAAAATGAGGATGTAATTTTCATT ACAAGCAAAATGTGACCCAAATCCCTTTCTTCTTAAATGAAAAAGAAATCTTGGA AAAATAATTAGTGACGGCCAAATCTTAACTATTTTAAATTACCCATGGTTAAACATAG GTGAGTTAAACATGTGCCCTTCAAATTAAGTTTGGCGTAAACATAACATTTGATAAA ACTTCCAAAATAATTATGAGTGGCTTATTCAGTCTTTGAATCCAGACCCCACTAAAACA ATTAACTTTAAAAGTGATATTTTTAAAACACCC
Restriction Sites:	NotI-NotI
ACCN:	NM_002895
Insert Size:	4700 bp
OTI Disclaimer:	Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery. 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
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:	<ol style="list-style-type: none"> 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_002895.2 , NP_002886.2
RefSeq Size:	4270 bp

RefSeq ORF:	3207 bp
Locus ID:	5933
UniProt ID:	P28749
Cytogenetics:	20q11.23
Domains:	RB_B, RB_A
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Cell cycle, TGF-beta signaling pathway
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) encodes the longest isoform (a). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.</p>