

## Product datasheet for **RG234357**

### PRC1 (NM\_001267580) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PRC1 (NM_001267580) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PRC1
Synonyms:	ASE1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG234357 representing NM\_001267580  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCGCGATCGCC

ATGAGGAGAAGTGAAGTCTGGCGGAGGAGTCCATAGTATGTCTGCAGAAAGCCCTAAATCACCTTCGGG  
 AAATATGGGAGCTAATTGGGATTCAGAGGACCGCGTTACAAAGAAGTGAAGTGGTAAAGAAGCATAT  
 CAAGGAAGAAGGAGAGACGACCATTCTGCAACTAGAAAAAGATTTGCGCACCCAAGTGAATTTGTCGA  
 AAACAGAAAAAGGAGAGAAAAACAGGAAGTGAAGTACTTCAAGAGCAAGATCAAGAAGTGTGCGAAATTC  
 TTTGTATGCCCACTATGATATTGACAGTGCCTCAGTCCAGCTTAGAAGAGCTGAACCAAGTTCAGGCA  
 ACATGTGACAACCTTTGAGGAAACAAAGGCTTCTAGGCGTGAGGAGTTTGTCAAGTATAAAGAGACAGATC  
 ATACTGTGTATGGAAGAATTAGACCACACCCAGACACAAGCTTTGAAAGAGATGTGGTGTGTGAAGACG  
 AAGATGCCTTTTGTCTTTGGAGAATATTGCAACACTACAAAAGTTGCTACGGCAGCTGGAAATGCA  
 GAAATCACAAAATGAAGCAGTGTGTGAGGGCTGCGTACTCAAATCCGAGAGCTCTGGGACAGGTTGCAA  
 ATACCTGAAGAAGAAAGAGAAGCTGTGGCCACCATTATGTCTGGGTCAAAGGCCAAGTCCGGAAAGCGC  
 TGCAATTAGAAGTGGATCGGTTGGAAGAAGTCAAATGCAAAAACATGAAGAAAGTGAATGAGGCAATTCG  
 AGTGGAGCTGGTTCAGTACTGGGACCAAGTCTTTATAGCCAGGAGCAGAGACAAGCTTTTGCCCTTTTC  
 TGTGCTGAGGACTACACAGAAAGTCTGCTCCAGCTCCACGATGCTGAGATTGTGCGGTTAAAAACTACT  
 ATGAAGTTCACAAGGAAGTCTTTGAAGTGTCCAGAAGTGGGAAGAAACCTGGAGGCTTTTCTTAGAGTT  
 TGAGAGAAAAGCTTCAGATCCAAATCGATTTACAAACCGAGGAGGAAATCTTCTAAAAGAAGAAAAACAA  
 CGAGCCAAGCTCCAGAAAATGCTGCCAAGCTGGAAGAAGAGTTGAAGGCACGAATTGAATTGTGGGAAC  
 AGGAACATTCAAAGGCATTTATGGTGAATGGGCAGAAATTCATGGAGTATGTGGCAGAACAATGGGAGAT  
 GCATCGATTGGAGAAAGAGAGAGCAAGCAGGAAAGACAAGTGAAGAACAACAAAAACAGACAGACAGAG  
 ATGCTGTATGGCAGCGCTCCTCGAACACCTAGCAAGCGGCGAGGACTGGCTCCCAATACACCGGGCAAAG  
 CACGTAAGCTGAACACTACCACCATGTCCAATGTACGGCCAATAGTAGCATTTCGGCCTATCTTTGGAGG  
 GACAGTCTACCACTCCCCGTGTCTCGACTTCTCCTTCTGGCAGCAAGCCAGTCTGCTTCCACCTGT  
 TCAGGGAAGAAAACACCCGACTGGCAGGCATGGAGCCAACAAGGAGAAGCTGGAGCTCAACGGCAGCA  
 TCCTGAGTGCAGAACTTCAAAGGCTTCAAATC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:**

>RG234357 representing NM\_001267580  
 Red=Cloning site Green=Tags(s)

MRRSEVLAEEESIVCLQKALNHLREIWLIGIPEDQRLQRTEVVKKHIKEEGETTILQLEKDLRTQVELMR  
 KQKKERKQELKLLQEQQELCEILCMPHYDIDSASVPSLEELNQFRQHVTTLRETKASRREEFVSIKRQI  
 ILCMEELDHTPDTSFERDVCEDEDAFCLSL ENIATLQKLLRQLEMQKSQNEAVCEGLRTQIRELWDRLO  
 IPEEEREAVATIMSGSKAKVRKALQLEVDRLEELKMQNMKKVIEAIRVELVQYWDQCFYSQEQRFAPF  
 CAEDYTESLLQLHDAEIVRLKNYYEVHKELFEGVQKWEETWRLFLEFERKASDPNRFNRRGGNLLKEEKQ  
 RAKLQKMLPKLEELKARIELWEQEHSKAFMVNGQKFMYYVAEQWEMHRLEKERAKQERQLKNNKQTETE  
 MLYGSAPRTPSKRRGLAPNTPGKARKLNTTMSNATANSSIRPIFGGTVYHSPVSRPPSGSKPVAASTC  
 SGKKTPTGRHGANKENLELNGSILSARTFKGFQI

TRTRPLE - GFP Tag - V

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_001267580

ORF Size: 1575 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\\_001267580.1](#), [NP\\_001254509.1](#)

RefSeq Size: 2965 bp

RefSeq ORF: 1578 bp

Locus ID: 9055

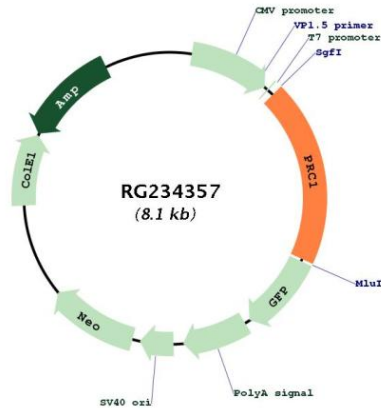
UniProt ID: [O43663](#)

Cytogenetics: 15q26.1

**Gene Summary:**

This gene encodes a protein that is involved in cytokinesis. The protein is present at high levels during the S and G2/M phases of mitosis but its levels drop dramatically when the cell exits mitosis and enters the G1 phase. It is located in the nucleus during interphase, becomes associated with mitotic spindles in a highly dynamic manner during mitosis, and localizes to the cell mid-body during cytokinesis. This protein has been shown to be a substrate of several cyclin-dependent kinases (CDKs). It is necessary for polarizing parallel microtubules and concentrating the factors responsible for contractile ring assembly. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2012]

**Product images:**



Circular map for RG234357