

## Product datasheet for **SC118290**

### **RPA34 (RPA2) (NM\_002946) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	RPA34 (RPA2) (NM_002946) Human Untagged Clone
Tag:	Tag Free
Symbol:	RPA34
Synonyms:	REPA2; RP-A p32; RP-A p34; RPA32
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC118290 sequence for NM_002946 edited (data generated by NextGen Sequencing)

```
ATGTGGAACAGTGGATTGAAAGCTATGGCAGCTCCTCATACGGGGGAGCCGGCGGCTAC
ACGCAGTCCCGGGGGGCTTTGGATCGCCCGCACCTTCTCAAGCCGAAAAGAAATCAAGA
GCCCAGAGCCAGCACATTGTGCCCTGACTATATCTCAGCTGCTTTCTGCCACTTTGGTT
GATGAAGTGTTGAGAATTGGGAATGTTGAGATTTACAGGTCAGTATTGTGGGGATCATC
AGACATGCAGAGAAGGCTCCAACCAACATTGTTTACAAAATAGATGACATGACAGCTGCA
CCCATGGACGTTCCGAGTGGGTTGACACAGATGACACCAGCAGTGAAAACACTGTGGTT
CCTCCAGAAACATATGTGAAAGTGGCAGGCCACCTGAGATCTTTTCAGAACAAAAAGAGC
CTGGTAGCCTTTAAGATCATGCCCTGGAGGATATGAATGAGTTCACCACACATATTCTG
GAAGTGATCAATGCACACATGGTACTAAGCAAAGCCAACAGCCAGCCCTCAGCAGGGAGA
GCACCTATCAGCAATCCAGGAATGAGTGAAGCAGGGAACCTTTGGTGGGAATAGCTTCATG
CCAGCAAATGGCCTCACTGTGGCCAAAACAGGTGTTGAATTTGATTAAGGCTTGTTCCA
AGACCTGAAGGGTTGAACCTTTCAGGATCTCAAGAACCAGCTGAAACACATGTCTGTATCC
TCAATCAAGCAAGCTGTGGATTTCTGAGCAATGAGGGGCACATCTATTCTACTGTGGAT
GATGACCATTTTAAATCCACAGATGCAGAATAA
```

Clone variation with respect to NM\_002946.3



[View online »](#)

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_002946 unedited  
 TGTCGNAATTTGTATACGACTCCTATAGGGCGGCCGCGATTTCGGCACGAGGTGGCGGCCG  
 CGTTCTGTGGTTTTCCGCTATCCCCCANACCCGCACCTTCTCGGCCTCTTTGCGGAGAA  
 TCGTGACCAAGATGTGGAACAGTGGATTGAAAGCTATGGCAGCTCCTCATACGGGGGAG  
 CCGGGCGCTACACGCAGTCCCCGGGGGCTTTGGATCGCCCGCACCTTCTCAAGCCGAAA  
 AGAAATCAAGAGCCCCGAGCCCAGCACATTGTGCCCTGTACTATATCTCAGCTGCTTTCTG  
 CCACTTTGGTTGATGAAGTGTTTCAAGAATTGGGAATGTTGAGATTCACAGGTCACATTG  
 TGGGATCATCAGACATGCAGAGAAGGCTCCAACCAACATTGTTTACAAAATAGATGACA  
 TGACAGCTGCACCCATGGACGTTTCGCCAGTGGGTTGACACAGATGACACCAGCAGTGAAA  
 ACACTGTGGTTCTCCAGAAACATATGTGAAAGTGGCAGGCCACCTGAGATCTTTTCAGA  
 ACAAAAAGAGCCTGGTAGCCTTTAAGATCATGCCCTGGAGGATATGAATGAGTTCACCA  
 CACATATTCTGGAAGTGATCAATGCACACATGGTACTAAGCAAAGCCAACAGCCAGCCCT  
 CAGCAGGGAGAGCACCTATCAGCAATCCAGGAATGAGTGAAGCAGGGAACTTTGGTGGGA  
 ATAGTTCATGCCAGCANATGGCCTCACTGTGGCCANNACCAGTGTGAAATTGATTAA  
 GGCTTGCCAAGACCTGAAGGTTGAACCTTCAGGGATCTCAGACCAGCTGAACACATGT  
 CTGTATCCTCATCAAGCAGCTGTGGATTTTTGAGCATGAGGGCACATCTATTTACTGTGG  
 ATGATGACCATTTAATA

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_002946 unedited  
 CTTGTACGCGGCCGAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT  
 TTTTTTTTTTTTACAAAAAAGTGTATTAACATATGACTGTATTTATTTTGTACA  
 AAATGCAGTAACACTTTTTCTTTCTCTGCCCTGGGAGGCACTACCGAAAATTCAT  
 GTTCACAAAAACACACGTCATGGGAAGTGTGCAAAAAGTCATGACAAGCAGGAAAGGGC  
 AATTTTAAAAGCAATGCCCCACAACCAAGTGGGAAATGAAAACCGGCAGAGGCCAACAG  
 GTTCTTGGCTAGGGCTCTGCCTATAACGCCCTGGACCTGCTCATTTTTTACGCAACAAAC  
 ATTTTAAGAAAAAAACTCCTGAGCACTATGTAAGTCCCTTCTGGTACCATCCTTACAA  
 TTCCATCTATTTAGAGGGTGAACAAGCTTATTTTTCACTTCTCAACAAACCCAAATCC  
 GTATTGAACCCCTCTCCAATTCCTCACTTCCCTTTGATTTTTATACTATCACCCACATAC  
 CCCAGCACAACTTCTATTTTACAGGTAAGGCTTAAAGCGCAATTTCTTAACCCACCCTC  
 ATTGCCAAAAAACCTTGCCAACTTATTCATACCTCGACACCACACCCCTTCCACATCT  
 ACCCCCCTCACTTACACTACTTCTTGTCTCAAATATTACCCTCCTCTTACTCTCTCTC  
 GTGCTCTAAAAGTGGCCCCCTCTCACCTCTTATTACTTCTTTCCCTTCCACTCCCCCTC  
 TCCCCCACCCTCCCTCCCCCGCAGTGTACCCCACTCTTTTTTCACTCCAGCCCCCCCCAC  
 CCCCAGACACCCCAACCCCGCCCCCTCCCTCCCCCACCACCTGCAACTCCGCTCC  
 CCG

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_002946

**Insert Size:**

1630 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).

**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).

<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_002946.3</a> , <a href="#">NP_002937.1</a>
<b>RefSeq Size:</b>	1741 bp
<b>RefSeq ORF:</b>	813 bp
<b>Locus ID:</b>	6118
<b>UniProt ID:</b>	<a href="#">P15927</a>
<b>Cytogenetics:</b>	1p35.3
<b>Domains:</b>	tRNA_anti
<b>Protein Families:</b>	Druggable Genome, Stem cell - Pluripotency
<b>Protein Pathways:</b>	DNA replication, Homologous recombination, Mismatch repair, Nucleotide excision repair
<b>Gene Summary:</b>	<p>This gene encodes a subunit of the heterotrimeric Replication Protein A (RPA) complex, which binds to single-stranded DNA (ssDNA), forming a nucleoprotein complex that plays an important role in DNA metabolism, being involved in DNA replication, repair, recombination, telomere maintenance, and co-ordinating the cellular response to DNA damage through activation of the ataxia telangiectasia and Rad3-related protein (ATR) kinase. The RPA complex protects single-stranded DNA from nucleases, prevents formation of secondary structures that would interfere with repair, and co-ordinates the recruitment and departure of different genome maintenance factors. The heterotrimeric complex has two different modes of ssDNA binding, a low-affinity and high-affinity mode, determined by which oligonucleotide/oligosaccharide-binding (OB) domains of the complex are utilized, and differing in the length of DNA bound. This subunit contains a single OB domain that participates in high-affinity DNA binding and also contains a winged helix domain at its carboxy terminus, which interacts with many genome maintenance protein. Post-translational modifications of the RPA complex also plays a role in co-ordinating different damage response pathways. [provided by RefSeq, Sep 2017]</p> <p>Transcript Variant: This variant (1) encodes isoform 1.</p>