

## Product datasheet for **SC119548**

### RPB2 (POLR2B) (NM\_000938) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	RPB2 (POLR2B) (NM_000938) Human Untagged Clone
Tag:	Tag Free
Symbol:	RPB2
Synonyms:	hRPB140; POL2RB; RPB2
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_000938, the custom clone sequence may differ by one or more nucleotides

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ATGTACGACGCGGATGAGGATATGCAATATGATGAGGATGATGATGAAATCACCCCGATTGTGGCAAG
AAGCATGCTGGATTGTAATCAGTTCCTATTTTGACGAGAAAGGCTTGGTTAGACAACAGCTGGATTCTTT
TGATGAGTTTATTCAGATGTCTGTTCAAAGAATTGTGGAAGACGCTCCTCCTATAGACCTACAGGCTGAA
GCTCAGCATGCTAGTGGAGAAGTGAAGAACCACCACGATATTTGCTGAAGTTTGAACAAATTTATCTTT
CCAAGCCTACCCATTGGGAAAGAGATGGTCTCCTTACCAATGATGCCCAATGAAGCTAGATTAAGGAA
TCTCACGATTCTGCTCCGCTTTATGTTGATATAACAAAAACAGTCATTAAGAAGGTGAAGAACAACCTT
CAGACTCAGCATCAGAAAACCTTTATAGGAAAAATCCAATTATGTTGCGGTCACTTACTGCCTTTTGA
ATGGCTTGACAGATCGTGATCTTTGTGAGTTAAATGAATGCCCTTTGGATCCTGGTGGCTATTTTCATTAT
TAATGGATCAGAAAAGGTTCTGATTGCCAAGAGAAAAATGGCAACAAACACAGTTTATGTGTTTGCCAAA
AAGGATTCTAAATATGCCTACACAGGAGAGTGTAGATCATGTCTTGAGAAATCTTCCCGACCCACCAGTA
CTATATGGGTTAGCATGCTGGCAAGAGGAGGACAGGGTGCCAAGAAGAGTGCTATTGGTCAGCGCATTGT
GGCAACTCTACCATATATCAAGCAAGAAGTCCCATCATTATTGTGTTTCCAGAGCATTAGGTTTTGTGTC
GACAGAGATATTTAGAACATATTTTATGATTTTGAAGATCCAGAGATGATGGAATGGTTAAACCTT
CTCTCGATGAAGCTTTTGTCAATCAAGAACAAGATGTTGCACTAAATTTTATTGGTTTACGAGGAGCAAA
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TGGCAGCTTTGGGTAGAAGAGAAGTATGATGACAGAGATCACTATGGAACAAGAGATTGGATCTTCTGCTGG
GCCGCTGCTTGCACTTCTATTTAGAGGTATGTTTAAAGATTTGCTTAAAGAAAGTGCAGTCTATGCACAG
AAATTTATTGATCGAGGAAAGGATTTTAACTTGGAGTTGGCAATTAACACCGGATCATATCTGATGGCC
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TCAGGTGTTAAACCGCTGACTTTTGGCTACTCTTTCTCACCTGCGTCTGTTAAATTCCTATTGGT
AGAGACGGCAAGCTAGCAAAACCAAGACAGTTGCATAATACGTTGTGGGGAATGGTGTCTCTGCCGAGA
CCCCAGAGGGCCATGCTGTAGGACTTGTGAAGAATTTAGCCTTGTGGCGTATATTTTCAAGTTGGATCTCA

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ACCATCTCCAATTCTGGAATTTTGAAGAATGGAGTATGGAAAAATTTAGAAGAAATTTCTCCTGCAGCT
ATTGCTGATGCAACCAAGATTTTGTAAATGGCTGCTGGGTGGAATACATAAAGATCCCGAACTTA
TGAACACCCTAAGGAAATGAGACGTCAGATGGACATCATTGTGTCTGAAGTTTCTATGATCAGAGATAT
TCGAGAGAGGGGAGATTCCGATCTATACGGATGCAGGCCGTATTTGTAGACCACCTTCTGATTGTGAAAAA
CAAAAGCTACTTTTGAAGAAGAGGCATATTGACCAATTGAAAGAGAGAGAATAAACAACATAGTTGGC
AGGATCTTGTGGCCAGTGGGTAGTGGAGTATATTGATACCCTGGAAGAAGAAACAGTGATGCTTGCAAT
GACTCCAGATGATTTACAGGAGAAGAAGTAGCTTATTGTTCCACATATACACACTGTGAGATTCATCCC
TCAATGATCCTTGGTGTCTGTGCATCTATTATCCCTTTCCTGATCATAACCAAGTCCCCTAGAAACACAT
ACCAGTCTGCTATGGGTAAAGCAGGCTATGGGAGTTTACATCACCAACTTCCATGTTTCGATGGACACATT
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CTCAATCAGGAAGGATATAAATTTGTAATAAGGGTACGCTCTGTTAGGATCCACAGATTGGAGACA
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CTGTGAAGGATCACCCCTGATATCATCATCAATCCCATGCCATCCCCTCTCGTATGACTATTGGTCAC
TTAATTGAATGCCTTCAAGGGAAGGTATCGGCTAAACAGGGTAAATGGTGATGCCACTCCATTTAATG
ATGCTGTTAACGTGCAGAAGATTTCTAATCTTTTATCTGATTATGGCTATCATCTCAGAGGAAATGAGGT
CCTGTACAATGGGTTCACTGGTCGAAAAATCACATCACAATATTTATTGGCCCCACTTATTACCAGCGT
TTGAAGCATATGGTGGATGATAAGATTCACTCTCGTGTAGGGGACCTTTCAGATCCTCAATAGACAGC
CCATGGAGGGTAGATCTCGTGATGGTGGCTGCGTTTTGGAGAAATGGAACGAGATTGTGAGATTGCCCA
TGGAGCAGCCAGTTTTTAAAGGAAAGATTGTTTGAAGCATCAGATCCATATCAGGTTTATGTTTGAAT
CTTTGTGGAATAATGGCGATTGCCAACACCAGGACCCATACATATGAATGCAGGGGCTGCCGCAATAAAA
CCCAGATTTCTTTGGTGCGAATGCCTTACGCATGCAAACATTGTTTTCAGGAACTTATGTCTATGAGTAT
TGCACCGCAATGATGAGTGTTAG
    
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**5' Read Nucleotide Sequence:**

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>OriGene 5' read for NM_000938 unedited
TTATTTGTATACGACTCACTATAGGGCGCCGCGAATTCGCACGAGGCTGCTGGCTTCTC
GGGCGGTTTTTGTCTTTTGAATTTCAAGAGTTAGGAGCTCGAGAACCGTTTGGCAATATGT
ACGACGCGGATGAGGATATGCAATATGATGAGGATGATGATGAAATCACCCCGGATTTGT
GGCAAGAAGCATGCTGGATTGTAATCAGTTCCTATTTGACGAGAAAGGCTTGGTTAGAC
AACAGCTGGATTCTTTTATGAGTATTATCAGATGTCTGTTCAAAGAATTGTGGAAGACG
CTCCTCTATAGACCTACCTGCTGAAGCTCAGCATGCTAGTGGAGAAGTTGAAGAACCGC
CACGATATTTGCTGAAGTTTGAACAAATTTATCTTTCCAAGCCTACCCATTGGGAAAGAG
ATGGTGTCTCTCACCAATGATGCCAATGAAGCTAGATTAAGGAATCTCACGATTCTG
CTCCGCTCTATGTTGATATAACAAAAACAGTCATTAAGAAGGTGAAGAACAACCTCAGA
CTCATCATCACAAAACCTTTATAGGAAAAATCCAATTATGCTGCGGTCAACTTACTGCC
TTTTGAATGGCTTGACAGAACGTGATCTTTGTGAGTTAAATGAATGCCCTTTGGATCCTG
CGGGCTATTTTATTATTAATGGATCAGAAAAGGCTCTGATTGCCCAAGAGAAAATGGCAC
CAAACACAGTTAATGTGTTCCGCAAAAGGATTCTAAATATGCCTACACAGGAGAGTGCAC
ATCATGTCTTGAGAAATCCTCCGACCCACCACTACTATATGGGCTACCATGCTGGCACCA
GGAGACAGGGTGCCCAANAATAGTGCTATTGGTCACCGCATTGTGGCACCTTACCATATT
AAACCAAGAAGTCTCATCATTATGTGGTCAAACCACTAGTTTTTCGCGCCCGACCAAAAT
    
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<b>3' Read Nucleotide Sequence:</b>	>OriGene 3' read for NM_000938 unedited ACCGCGGGCCGCAATCTAGAGTCGAGTTTTTTTTTTTTTTTTTGGCTATCTACAAAATT TATTATATATTTACAGAAGAAAAGCATGCATATCATTAAACAAATAAAATACTTTTTATC ACAACACAGTACATATTTGTCATTTTTAAAAAGCCACACAATAGAAAACAAGACACCAAGA TATTTAATTATCTTGTGACTCCTGTAAAATAGCTAAACACTCATCTTCGCGGTGCAAT ACTCATAGACATAAGTTCTGAAACAATAGTTTGCATGCGTAAGGCATTTCGCACCAAGA AATCTGGGTTTTATTGCGGCAGCCCTGCATTTCATATGTATGGGTCTGGTGTGGCAAT CGCCATTATTCCACAAAGATTGCAACATGAACCTGATATGGATCTGATGCCTCAAACAA TCTTTCCCTTAAAACTGGGCTGCTCCATGGGCAATCTGACAATCTCGTTCATTCTCC AAAACGCAGGCCACCATCACGAGATCTACCCTCCATGGGCTGTCTATTGAGGATCTGAAT AGGTCCCCTAGCAGGAGAGTGAATCTTATCATCCACCATATGCTTCAAACGCTGGTAATA AGTGGGGCAATAAATATTTGTGATGTGGATTTTCGACCAGTGAACCCATTGTACAGGAC CTCATTCTCTGAGATGATTGCCCATATCAGATTAAGATTAGAAATCTTCTGCACGTT AACAGCATCATAAATGGAGTGGGATCACCATTTACCCCTGGTAGCCATACCTTCCCT TGAAAGCATTCTAAAGGGACCATAGTCTACCAAAGGGGGATGGCTGGGGATTGATG ATGATATCAAGGGTGAAACCTTCCACGTGAAAAGGCTATCCCTTGTCTTTACTGAAAC CACAAGTACCCTTTTGCATGTGGACTAGCAAATTGGGTACAT
<b>Restriction Sites:</b>	NotI-NotI
<b>ACCN:</b>	NM_000938
<b>Insert Size:</b>	4150 bp
<b>OTI Disclaimer:</b>	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).
<b>Components:</b>	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_000938.1</a> , <a href="#">NP_000929.1</a>
<b>RefSeq Size:</b>	3748 bp
<b>RefSeq ORF:</b>	3525 bp
<b>Locus ID:</b>	5431
<b>UniProt ID:</b>	<a href="#">P30876</a>
<b>Cytogenetics:</b>	4q12
<b>Domains:</b>	RNA_pol_Rpb2_6, RNA_pol_Rpb2_7, RNA_pol_Rpb2_2, RNA_pol_Rpb2_1, RNA_pol_Rpb2_3, RNA_pol_Rpb2_4, RNA_pol_Rpb2_5

**Protein Families:** Transcription Factors

**Protein Pathways:** Huntington's disease, Metabolic pathways, Purine metabolism, Pyrimidine metabolism, RNA polymerase

**Gene Summary:** This gene encodes the second largest subunit of RNA polymerase II (Pol II), a DNA-dependent RNA polymerase that catalyzes the transcription of DNA into precursors of mRNA, snRNA and microRNA. This subunit and the largest subunit form opposite sides of the center cleft of Pol II. Deletion of the flap loop region of this subunit results in a decrease in the rate of transcriptional elongation. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Dec 2014]  
Transcript Variant: This variant (1) encodes the longest isoform (1).