

Product datasheet for **SC300156**

POLR2A (NM_000937) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: POLR2A (NM_000937) Human Untagged Clone
Tag: Tag Free
Symbol: POLR2A
Synonyms: hRPB220; hsRPB1; NEDHIB; POLR2; POLRA; RPB1; RPBh1; RpILS; RPO2; RPOL2
Mammalian Cell Selection: None
Vector: pCMV6-XL6
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_000937 edited
 ATGCACGGGGTGGCCCCCTCGGGGACAGCGCATGCCCGCTGCGCACCATCAAGAGA
 ATCCAGTTCGGAGTCTGAGTCCGGATGAACTGAAGCGAATGTCTGTGACGGAGGTGGC
 ATCAAATACCCAGAGACGACTGAGGGAGGCCGCCCAAGCTTGGGGGGCTGATGGACCCG
 AGGCAGGGGGTGATTGAGCGGACTGGCCGCTGCCAAACATGTGCAGGAAACATGACAGAG
 TGTCTGGCCACTTTGGCCACATTGAACTGGCCAAGCCTGTGTTTACAGTGGGCTTCTG
 GTGAAGACAATGAAAGTTTTGCGCTGTGTCTGCTTCTTCTGCTCCAAACTGCTTGTGGAC
 TCTAACAAACCAAGATCAAGGATATCCTGGCTAAGTCCAAGGGACAGCCCAAGAAGCGG
 CTCACACATGTCTACGACCTTTGCAAGGGCAAAAACATATGCGAGGGTGGGGAGGAGATG
 GACAACAAGTTCCGGTGTGGAACAACCTGAGGGTGACGAGGATCTGACCAAGAAAAGGGC
 CATGGTGGCTGTGGGCGGTACCAGCCCAGGATCCGGCGTTCTGGCCTAGAGCTGTATGCG
 GAATGGAAGCACGTTAATGAGGACTCTCAGGAGAAGAAGATCCTGCTGAGTCCAGAGCGA
 GTGCATGAGATCTTCAAACGCATCTCAGATGAGGAGTGTGTTTGTGCTGGGCATGGAGCCC
 CGCTATGCACGGCCAGAGTGGATGATTGTACAGTGTGCTGCTGCCCCGCTCTCCGTG
 CGGCTGCTGTTGTGATGCAGGGCTCTGCCCGTAACCAGGATGACCTGACTCACAAACTG
 GCTGACATCGTGAAGATCAACAATCAGCTGCGGCGCAATGAGCAGAACGGCGCAGCGCC
 CATGTCATTGCAGAGGATGTGAAGCTCCTCCAGTTCATGTGGCCACCATGGTGGACAAT
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 CAGCGGTTGAAGGGCAAGGAAGGCCGGGTGCGAGGGAACCTGATGGGCAAAAGAGTGGAC
 TTCTCGGCCCGTACTGTATCACCCCGACCCCAACCTCTCCATTGACCAGGTTGGCGTG
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 AGACTTCAAGAACTAGTGCAGGGGGAACAGCCAGTACCAGGCGCAAGTACATCATC
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 CAGACCGGCTATAAGGTGGAACGGCACATGTGTGATGGGGACATTGTTATCTTCAACCGG
 CAGCCAACTCTGCACAAAATGTCCATGATGGGGCATCGGGTCCGATTCTCCATGGTCT
 ACCTTTGCTTGAATCTTAGCGTGACAACTCCGTACAATGCAGACTTTGACGGGGATGAG
 ATGAACCTGCACCTGCCACAGTCTCTGGAGACGCGAGCAGAGATCCAGGAGCTGGCCATG



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GTTCTCGCATGATTGTACCCCCAGAGCAATCGGCCTGTCATGGGTATTGTGCAGGAC
 ACACTCACAGCAGTGCACAAATTCACCAAGAGAGACGTCTTCTGGAGCGGGGTGAAGTG
 ATGAACCTCCTGATGTTCTGTGACGTGGGATGGGAAGTCCCACAGCCGGCCATCCTA
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 CGCCAGGACACAGGACCACTCATGAAGTGTCTTTGAGGAAACGGTGGACGTGCTTATG
 GAAGCAGCCGCACACGGTGAAGTGAACCCATGAAGGGGTCTCTGAGAATATCATGCTG
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 AAGTATGGCATGGAGATCCCCACCAATATCCCCGGCTGGGGGCTGCTGGACCCACCGGC
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 AACCAGGGTGCAACCCCTGCCTATGGCGCTGGTCCCCAGTGTGGGAGTGGAAATGACC
 CCAGGGGCAGCCGGCTTCTCCTCCAGTGTGCTGAGTCCAGCGGCTTACGCCAGGT

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CCAACCAGTCTTCTTATAGTCCAGCTCCCCAGAGTATACCCCAACCTCTCCAAGTAC
TCACCTACCAGTCCCAAATATTACCCACCTCTCCAAGTACTCGCTACCAGTCCCACC
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GGGCCCAGGGCAGCTTGGCCGTGCTGCCGTGCAGTTCTTGCTCCCTACGGGGCGTAC
CCCCAGCCAGCTCCGTTGTACATAAATGCCTTGTGGCAGAGCTCCCGGTGAACCTTGG
ATCCCGTTTCTGATGCAGATTCTTGTCTTGTCTCCACTTGTGCTGTTAGAAGTACTGG
CCCAGTGGTGTCTCACTCTACCCACCACCCCTGCCTGTCCCAAAATTGAAGATCC
TTCCTTGCTGTGGCTTGTGCGGGGCGGGTAAAGGGTATTTAACTTAGGGGTAGTTCC
TGCTGTGAGTGGTTACAGCTGATCCTCGGGAAGAAAGCTAAAGTGCCTTTTGTCTG
TTATTTTATTTTTTGAAGTTTAAATAAAGTTTACTAATTTTGACC

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_000937 unedited
GGGTCAGCATTTTGTTTACGACTCATATAGCGGCCCGATTCTGCACGGGGTGGCCCCC
CTCGGGGACAGCGCATGCCCGTGCACCATCAAGAGAGTCCAGTTTCGGAGTCTGAG
TCCGGATGAAGTGAAGCGAATGTCTGTGACGGAGGGTGGCATCAAATACCCAGAGACGAC
TGAGGGAGGCCGCCCAAGCTTGGGGGGCTGATGGACCCGAGGCAGGGGGTATTGAGCG
GACTGGCCGCTGCCAAACATGTGCAGGAAACATGACAGAGTGTCTGGCCACTTTGGCCA
CATTGAACTGGCCAAGCCTGTGTTTACGTGGGCTTCTGGTGAAGACAATGAAAGTTTT
GCGCTGTGTCTGTTCTTCTGCTCCAACTGCTTGTGGACTCTAACAACCCAAAGATCAA
GGATATCCTGGCTAAGTCCAAGGACAGCCCAAGAAGCGGCTCACACATGTCTACGACCT
TTGCAAGGGCAAAAACATATGCGAGGGTGGGGAGGAGATGGACAACAAGTTCGGTGTGGA
ACAACCTGAGGGTGACGAGGATCTGACCAAGAAAAGGGCCATGGTGGCTGTGGGCGGTA
CCAGCCCAGGATCCGGCCTTCTGGCCTAGAGCTGTATGCGGAATGGAAGCACGTTAATGA
GGACTCTCANGAGAAAGAGATCCTGCTGAGTCCAGAGCGAGTGCATGAGATCTTCANACG
CATCTCAGATGAGGAGTGTGTTGTGCTGGGCATGGAGCCCCGCTATGCACGGCCAGAGTG
GATGATTGTACAGTGTGCTGTGCCCGCTTCTGTCGGCCTGTGTGTGATGCAG
GGCTCTGCCCGTAACCCGGATGACCTGACTTACAACTGCTGACTCGTGAAGATCACATC
ACTGCGGCGCAAGAGCA

Restriction Sites:

Please inquire

ACCN:

NM_000937

Insert Size:

6500 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
OTI Annotation:	<p>This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.</p>
Components:	<p>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).</p>
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_000937.2 , NP_000928.1
RefSeq Size:	6732 bp
RefSeq ORF:	5913 bp
Locus ID:	5430
UniProt ID:	P24928
Cytogenetics:	17p13.1
Protein Pathways:	Huntington's disease, Metabolic pathways, Purine metabolism, Pyrimidine metabolism, RNA polymerase
Gene Summary:	<p>This gene encodes the largest subunit of RNA polymerase II, the polymerase responsible for synthesizing messenger RNA in eukaryotes. The product of this gene contains a carboxy terminal domain composed of heptapeptide repeats that are essential for polymerase activity. These repeats contain serine and threonine residues that are phosphorylated in actively transcribing RNA polymerase. In addition, this subunit, in combination with several other polymerase subunits, forms the DNA binding domain of the polymerase, a groove in which the DNA template is transcribed into RNA. [provided by RefSeq, Jul 2008]</p>