

Product datasheet for MC224866

Polr1a (NM_009088) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Polr1a (NM_009088) Mouse Untagged Clone
Tag: Tag Free
Symbol: Polr1a
Synonyms: 194kDa; 3010014K16Rik; mRPA1; RPA194; Rpo1-4
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Cell Selection: Neomycin
Fully Sequenced ORF: >MC224866 representing NM_009088
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTGGCCTCCAAGCACACCCATGGAGGCGGCTTCAGGGCATTTCCTTCGGAATGTATTCGGCCGAAG
 AGCTCAAGAAGTTAAGTGTAAATCCATTACAAATCCTCGATACGTGGACTACCTGGAAACCCCTCAGC
 AAATGGCCTGTATGATTTGGCTTTGGGCTCCTGCAGATTCAAAGAAGTATGCGCTACCTGGTGCAGGAC
 TTCAACAACCTGCTCTGGACACCTGGGCCACATTGATCTCCCGCTCACAGTCTACAACCCCTTCTCTTTG
 ATAAACTCTACCTGCTGCTTCGAGGCTCCTGTTTGAGTTGCCACATGCTGACTTGTCTCGGGCTGCAAT
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 ATTCTCAGCAGGTTTCTGGAAGAACTGGAGATCCTTCCGCCCTCGAAATTAAGAAGAGTTAGAAGAAT
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 GTCATCAATGGACCAATGTGCACCCAGGAGCCTCCATGGTCATCAACGAGGATGGCAGTCGCACAGCCC



TGAGCTCAGTGGATGCTGCGCAGCGGAAGCTGTGGCCAAACAGCTCCTGACACCAGCCACAGGGGCTCC
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 TTCCTATGCCAACTGCAAGGCCATAATGCTGACTTTGATGGAGATGAGATGAACGCCCACTTCCCCCA
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 GAGAGCTACACAGAAGGACCTCAATGACTGAGGACTCGGGGAGGAGTCAAGAGAGGAGGAAAGGGAT
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 GCAAGGAGAAGCAAGAAGAAGAGGTTGACTATGAGAGTGAAGAAAGGAGAGGAGGAAAGGAGGAGGA
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 CGACCAACAGTAAGAATGAGAAGGAGCTTGTACTGAACACGGAGGGAATCAACCTTCCCGAGCTGTTCAA
 GTACTCCGAGATACTGGACCTGCGCCGCTCTACTCCAATGACATCCACGCCATGGCCAATACTTATGGC
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 GCCACCATGATGGGATCCCATGATGAACTCAAGTCACTTCCGCCTGCCTCGTGGTGGGAAAAGTTGTCA
 AAGCGGGACAGGCTGTTTGTGCTCAAGCAGCCCTAAGATAG

ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGA
TTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-NotI

ACCN: NM_009088

Insert Size: 5154 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).

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_009088.3](#), [NP_033114.3](#)

RefSeq Size: 6145 bp

RefSeq ORF: 5154 bp

Locus ID: 20019

UniProt ID: [O35134](#)

Cytogenetics: 6 32.21 cM

Gene Summary: DNA-dependent RNA polymerase catalyzes the transcription of DNA into RNA using the four ribonucleoside triphosphates as substrates. Largest and catalytic core component of RNA polymerase I which synthesizes ribosomal RNA precursors. Forms the polymerase active center together with the second largest subunit. A single stranded DNA template strand of the promoter is positioned within the central active site cleft of Pol I. A bridging helix emanates from RPA1 and crosses the cleft near the catalytic site and is thought to promote translocation of Pol I by acting as a ratchet that moves the RNA-DNA hybrid through the active site by switching from straight to bent conformations at each step of nucleotide addition (By similarity).[UniProtKB/Swiss-Prot Function]