

## Product datasheet for MR212069

### Polr1a (NM\_009088) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Polr1a (NM_009088) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Polr1a
Synonyms:	194kDa; 3010014K16Rik; mRPA1; RPA194; Rpo1-4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR212069 representing NM_009088 Red=Cloning site Blue=ORF Green=Tags(s)

CTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCCGGCGC  
GCC

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GTCATCAATGGACCCAATGTGCACCCAGGAGCCTCCATGGTCATCAACGAGGATGGCAGTCGCACAGCCC  
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AAGCGGGACAGGCCTGTTTGAGCTCAAGCAGCCCTAAGA

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TTACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR212069 representing NM\_009088  
Red=Cloning site Green=Tags(s)

MLASKHTPWRLQGISFGMYSAEELKKLSVKSITNPRYVDYLGPNPSANGLYDLALGPADSKEVCATCVQD  
FNNCSGHLGHIDLPLTVYNPFLFDKLYLLLRGSCLSCHMLTCPRAAIYLLISQLRVLEVGAQAVYELER  
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LGL EEEEESSQKPPRRHSRPOGAEAIKRRIQAVRESYSFIEDYQYDTEESLWCQVTVKLPLMKINFDMSSL  
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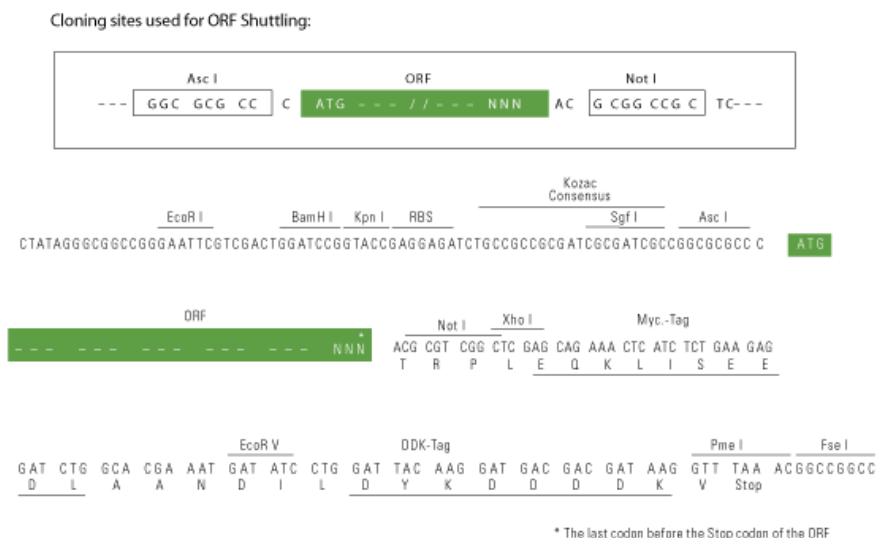
TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mm9105\\_c09.zip](https://cdn.origene.com/chromatograms/mm9105_c09.zip)

**Restriction Sites:**

Ascl-NotI

**Cloning Scheme:**


**ACCN:** NM\_009088

**ORF Size:** 5151 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\\_009088.3](#), [NP\\_033114.3](#)

**RefSeq Size:** 6145 bp

**RefSeq ORF:** 5154 bp

**Locus ID:** 20019

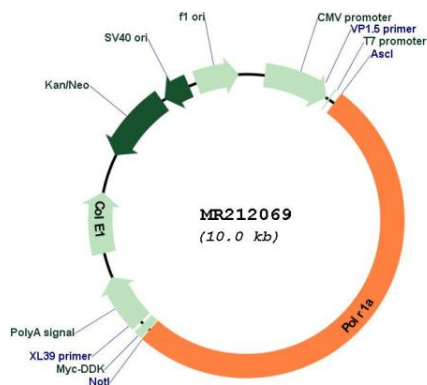
**UniProt ID:** [O35134](#)

**Cytogenetics:** 6 32.21 cM

**MW:** 194.1 kDa

**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]

### Product images:



Circular map for MR212069