

## Product datasheet for RC210501

### mtRNA polymerase (POLRMT) (NM\_005035) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	mtRNA polymerase (POLRMT) (NM_005035) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	mtRNA polymerase
Synonyms:	APOLMT; h-mtRPOL; MTRNAP; MTRPOL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC210501 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RC210501 protein sequence  
 Red=Cloning site Green=Tags(s)

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Chromatograms: [https://cdn.origene.com/chromatograms/mk6220\\_f07.zip](https://cdn.origene.com/chromatograms/mk6220_f07.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

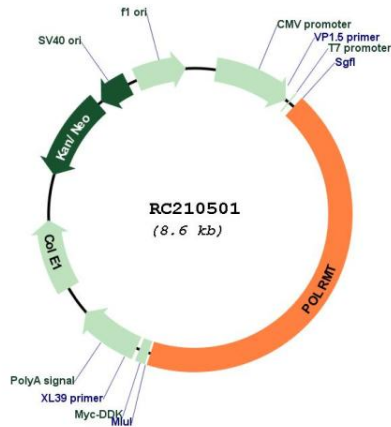


ACCN: NM\_005035

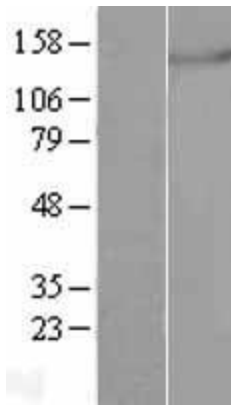
ORF Size: 3690 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<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_005035.4</a>
<b>RefSeq Size:</b>	3800 bp
<b>RefSeq ORF:</b>	3693 bp
<b>Locus ID:</b>	5442
<b>UniProt ID:</b>	<a href="#">O00411</a>
<b>Cytogenetics:</b>	19p13.3
<b>Protein Families:</b>	Transcription Factors
<b>MW:</b>	138.5 kDa
<b>Gene Summary:</b>	This gene encodes a mitochondrial DNA-directed RNA polymerase. The gene product is responsible for mitochondrial gene expression as well as for providing RNA primers for initiation of replication of the mitochondrial genome. Although this polypeptide has the same function as the three nuclear DNA-directed RNA polymerases, it is more closely related to RNA polymerases of phage and mitochondrial polymerases of lower eukaryotes. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC210501



Western blot validation of overexpression lysate (Cat# [LY417597]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210501 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).