

# mtRNA polymerase Rabbit pAb

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Catalog # AP56888

## Product Information

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<b>Application</b>	WB
<b>Primary Accession</b>	<a href="#">O00411</a>
<b>Reactivity</b>	Human
<b>Predicted</b>	Mouse, Rat
<b>Host</b>	Rabbit
<b>Clonality</b>	Polyclonal
<b>Calculated MW</b>	138620
<b>Physical State</b>	Liquid
<b>Immunogen</b>	KLH conjugated synthetic peptide derived from human mtRNA polymerase
<b>Epitope Specificity</b>	951-1050/1230
<b>Isotype</b>	IgG
<b>Purity</b>	affinity purified by Protein A
<b>Buffer</b>	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
<b>SUBCELLULAR LOCATION</b>	Mitochondrion.
<b>SIMILARITY</b>	Belongs to the phage and mitochondrial RNA polymerase family.
<b>SUBUNIT</b>	Interacts with TFB1M and TFB2M, leading to the stimulation of transcription. Interacts with TEFM.
<b>Important Note</b>	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
<b>Background Descriptions</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]

## Additional Information

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<b>Gene ID</b>	5442
<b>Other Names</b>	DNA-directed RNA polymerase, mitochondrial, MtrPOL, 2.7.7.6, POLRMT ( <a href="#">HGNC:9200</a> )
<b>Dilution</b>	WB=1:500-2000
<b>Storage</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

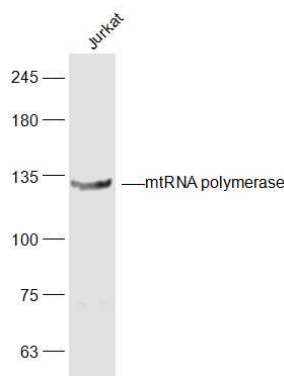
## Protein Information

<b>Name</b>	POLRMT ( <a href="#">HGNC:9200</a> )
<b>Function</b>	DNA-dependent RNA polymerase catalyzes the transcription of mitochondrial DNA into RNA using the four ribonucleoside triphosphates as substrates (PubMed: <a href="#">21278163</a> , PubMed: <a href="#">33602924</a> ). Component of the mitochondrial transcription initiation complex, composed at least of TFB2M, TFAM and POLRMT that is required for basal transcription of mitochondrial DNA (PubMed: <a href="#">29149603</a> ). In this complex, TFAM recruits POLRMT to a specific promoter whereas TFB2M induces structural changes in POLRMT to enable promoter opening and trapping of the DNA non- template strand (PubMed: <a href="#">29149603</a> ). Has DNA primase activity (PubMed: <a href="#">18685103</a> , PubMed: <a href="#">33602924</a> ). Catalyzes the synthesis of short RNA primers that are necessary for the initiation of lagging-strand DNA synthesis from the origin of light-strand DNA replication (OriL) (PubMed: <a href="#">18685103</a> , PubMed: <a href="#">33602924</a> ).
<b>Cellular Location</b>	Mitochondrion

## Background

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]

## Images



Sample:  
Jurkat(Human) Cell Lysate at 30 ug  
Primary: Anti-mtRNA polymerase (AP56888) at 1/300 dilution  
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution  
Predicted band size: 134 kD  
Observed band size: 134 kD

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.