

## Product datasheet for RC204456L2

### DNA Polymerase gamma (POLG) (NM\_002693) Human Tagged Lenti ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	DNA Polymerase gamma (POLG) (NM_002693) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	DNA Polymerase gamma
Synonyms:	MDP1; MIRAS; MTDPS4A; MTDPS4B; PEO; POLG1; POLGA; SANDO; SCAE
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC204456).
Restriction Sites:	SgfI-MluI
Cloning Scheme:	

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF.

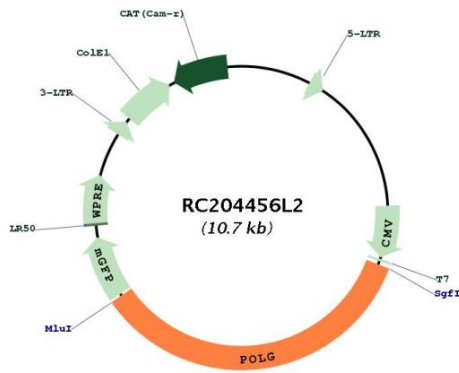
ACCN:	NM_002693
ORF Size:	3717 bp



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<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_002693.1</a>
<b>RefSeq Size:</b>	4464 bp
<b>RefSeq ORF:</b>	3720 bp
<b>Locus ID:</b>	5428
<b>UniProt ID:</b>	<a href="#">P54098</a>
<b>Cytogenetics:</b>	15q26.1
<b>Domains:</b>	DNA_pol_A
<b>Protein Families:</b>	Druggable Genome
<b>Protein Pathways:</b>	Metabolic pathways
<b>MW:</b>	139.6 kDa
<b>Gene Summary:</b>	Mitochondrial DNA polymerase is heterotrimeric, consisting of a homodimer of accessory subunits plus a catalytic subunit. The protein encoded by this gene is the catalytic subunit of mitochondrial DNA polymerase. The encoded protein contains a polyglutamine tract near its N-terminus that may be polymorphic. Defects in this gene are a cause of progressive external ophthalmoplegia with mitochondrial DNA deletions 1 (PEOA1), sensory ataxic neuropathy dysarthria and ophthalmoparesis (SANDO), Alpers-Huttenlocher syndrome (AHS), and mitochondrial neurogastrointestinal encephalopathy syndrome (MNGIE). Two transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC204456L2