

## Product datasheet for RC204456L3V

## OriGene Technologies, Inc.

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## DNA Polymerase gamma (POLG) (NM 002693) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

**Product Name:** DNA Polymerase gamma (POLG) (NM\_002693) Human Tagged ORF Clone Lentiviral Particle

Symbol: DNA Polymerase gamma

Synonyms: MDP1; MIRAS; MTDPS4A; MTDPS4B; PEO; POLG1; POLGA; SANDO; SCAE

Mammalian Cell

Selection:

Puromycin

**Vector:** pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK
ACCN: NM 002693

ORF Size: 3717 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC204456).

OTI Disclaimer:

Sequence:

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.

**RefSeq:** <u>NM 002693.1</u>

 RefSeq Size:
 4464 bp

 RefSeq ORF:
 3720 bp

 Locus ID:
 5428

 UniProt ID:
 P54098

 Cytogenetics:
 15q26.1

Domains: DNA\_pol\_A

**Protein Families:** Druggable Genome





## DNA Polymerase gamma (POLG) (NM\_002693) Human Tagged ORF Clone Lentiviral Particle – RC204456L3V

**Protein Pathways:** Metabolic pathways

**MW:** 139.6 kDa

**Gene Summary:** 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]