

Product datasheet for RC203462L2

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OriGene Technologies, Inc.

POLG2 (NM_007215) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: POLG2 (NM_007215) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: POLG2

Synonyms: HP55; MTDPS16; MTPOLB; PEOA4; POLB; POLG-BETA; POLGB

Mammalian Cell None

Selection:

Vector:pLenti-C-mGFP (PS100071)E. coli Selection:Chloramphenicol (34 ug/mL)

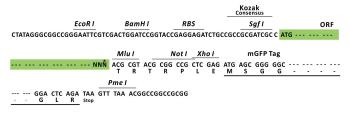
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC203462).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF.

ACCN: NM_007215

ORF Size: 1455 bp





POLG2 (NM_007215) Human Tagged Lenti ORF Clone - RC203462L2

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: <u>NM 007215.2</u>

 RefSeq Size:
 1607 bp

 RefSeq ORF:
 1458 bp

 Locus ID:
 11232

 UniProt ID:
 Q9UHN1

Cytogenetics: 17q23.3

Domains: HGTP anticodon

Protein Families: Stem cell - Pluripotency

Protein Pathways: Metabolic pathways

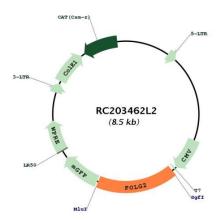
MW: 54.9 kDa

Gene Summary: This gene encodes the processivity subunit of the mitochondrial DNA polymerase gamma.

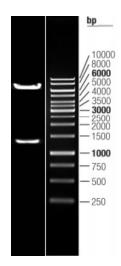
The encoded protein forms a heterotrimer containing one catalytic subunit and two processivity subunits. This protein enhances DNA binding and promotes processive DNA synthesis. Mutations in this gene result in autosomal dominant progressive external ophthalmoplegia with mitochondrial DNA deletions.[provided by RefSeq, Sep 2009]



Product images:



Circular map for RC203462L2



Double digestion of RC203462L2 using Sgfl and Mlul