

## Product datasheet for RC231464L2V

## OriGene Technologies, Inc.

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## Telomerase reverse transcriptase (TERT) (NM\_001193376) Human Tagged ORF Clone Lentiviral Particle

**Product data:** 

**Product Type:** Lentiviral Particles

Product Name: Telomerase reverse transcriptase (TERT) (NM 001193376) Human Tagged ORF Clone

Lentiviral Particle

**Symbol:** Telomerase reverse transcriptase

Synonyms: CMM9; DKCA2; DKCB4; EST2; hEST2; hTRT; PFBMFT1; TCS1; TP2; TRT

**Mammalian Cell** 

Selection:

None

**Vector:** pLenti-C-mGFP (PS100071)

Tag: mGFP

**ACCN:** NM\_001193376

ORF Size: 3207 bp

**ORF Nucleotide** 

The ORF insert of this clone is exactly the same as(RC231464).

**OTI Disclaimer:** 

Cytogenetics:

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 001193376.1</u>

 RefSeq Size:
 3829 bp

 RefSeq ORF:
 3210 bp

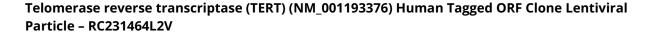
 Locus ID:
 7015

 UniProt ID:
 014746

**Protein Families:** Druggable Genome

5p15.33







**MW:** 120 kDa

**Gene Summary:** 

Telomerase is a ribonucleoprotein polymerase that maintains telomere ends by addition of the telomere repeat TTAGGG. The enzyme consists of a protein component with reverse transcriptase activity, encoded by this gene, and an RNA component which serves as a template for the telomere repeat. Telomerase expression plays a role in cellular senescence, as it is normally repressed in postnatal somatic cells resulting in progressive shortening of telomeres. Deregulation of telomerase expression in somatic cells may be involved in oncogenesis. Studies in mouse suggest that telomerase also participates in chromosomal repair, since de novo synthesis of telomere repeats may occur at double-stranded breaks. Alternatively spliced variants encoding different isoforms of telomerase reverse transcriptase have been identified; the full-length sequence of some variants has not been determined. Alternative splicing at this locus is thought to be one mechanism of regulation of telomerase activity. [provided by RefSeq, Jul 2008]