

## Product datasheet for **RC217436L2V**

### Telomerase reverse transcriptase (TERT) (NM\_198253) Human Tagged ORF Clone Lentiviral Particle

#### Product data:

Product Type:	Lentiviral Particles
Product Name:	Telomerase reverse transcriptase (TERT) (NM_198253) Human Tagged ORF Clone Lentiviral Particle
Symbol:	TERT
Synonyms:	CMM9; DKCA2; DKCB4; EST2; hEST2; hTRT; PFBMFT1; TCS1; TP2; TRT
Mammalian Cell Selection:	None
Vector:	pLenti-C-mGFP (PS100071)
Tag:	mGFP
ACCN:	NM_198253
ORF Size:	3396 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC217436).
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. <a href="#">More info</a>
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:	<a href="#">NM_198253.2</a>
RefSeq Size:	4018 bp
RefSeq ORF:	3399 bp
Locus ID:	7015
UniProt ID:	<a href="#">O14746</a>
Cytogenetics:	5p15.33
Protein Families:	Druggable Genome



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**MW:** 127 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]