

## Product datasheet for RR207530L3V

## OriGene Technologies, Inc.

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## Pif1 (NM\_001044253) Rat Tagged ORF Clone Lentiviral Particle

**Product data:** 

Product Type: Lentiviral Particles

**Product Name:** Pif1 (NM\_001044253) Rat Tagged ORF Clone Lentiviral Particle

Symbol: Pif1

Mammalian Cell Puromycin

Selection:

Vector:

pLenti-C-Myc-DDK-P2A-Puro (PS100092)

Tag: Myc-DDK

**ACCN:** NM\_001044253

ORF Size: 1911 bp

**ORF Nucleotide** 

OTI Disclaimer:

The ORF insert of this clone is exactly the same as(RR207530).

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 001044253.1</u>, <u>NP 001037718.1</u>

 RefSeq Size:
 1915 bp

 RefSeq ORF:
 1914 bp

 Locus ID:
 367645

 UniProt ID:
 Q1HG60

Cytogenetics: 8q24







## **Gene Summary:**

DNA-dependent ATPase and 5'-3' DNA helicase required for the maintenance of both mitochondrial and nuclear genome stability. Efficiently unwinds G-quadruplex (G4) DNA structures and forked RNA-DNA hybrids. Resolves G4 structures, preventing replication pausing and double-strand breaks (DSBs) at G4 motifs. Involved in the maintenance of telomeric DNA. Inhibits telomere elongation, de novo telomere formation and telomere addition to DSBs via catalytic inhibition of telomerase. Reduces the processivity of telomerase by displacing active telomerase from DNA ends. Releases telomerase by unwinding the short telomerase RNA/telomeric DNA hybrid that is the intermediate in the telomerase reaction. Possesses an intrinsic strand annealing activity.[UniProtKB/Swiss-Prot Function]