

Product datasheet for **RC223376**

PIF1 (NM_025049) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIF1 (NM_025049) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PIF1
Synonyms:	C15orf20; PIF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide
Sequence:

>RC223376 representing NM_025049
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTCTCGGGCATAAGGCGGGCAGGGGAATATGAGGACTCGGAGCTGCGGTGCCGCTGGCTGTGG
AGGAGCTGAGCCGGGCGGGCAGCCGCGAAGGCGCCAGGCCCTGCGCACCGCGGAGCTGAGCCTGGGTCTG
CAACGAGCGCCGCGAGTTGATGCTGCGGCTGCAAGCGCCAGGGCCCGGGGGCGCCGCGCTGCTTCCCT
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GCGCACATTGCGCCTCAAGCTGGCTGCGGCCCGGGTCCCGGGCCGGCTCCGCCGAGCGCAGCTGCTG
GGCCCGGGCCCGCGACTTCGTACCATCAGCCCTGTGCAGCCCGAGGAGCGGGGCTCAGGGCGGCCA
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CTAGCCAGTGTGTGGCCCTGGCCCAAAGGCCAGGCGTGCAGGAGGGTGGCTGAACTGCCAGCGTTGG
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GCTCCTCAGTCGGCAGCAGCTGCCCTCCAGCTGGCTGGCGATGTCCATCCACAAGAGCCAAGGCATG
ACCCTGGATTGTGTGGAGATTTCTTGGCCGTGTGTTTCCAGTGGCCAGGCCTATGTGGCCCTTCTC
GGCCCGCAGCCTGCAGGGCCTACGTGTGCTGGACTTTGACCCCATGGCGGTTTCGCTGTGACCCCGTGT
GCTGCACTTCTATGCCACCTGCGGGGGCAGGAGCCTCAGTCTGGAGTCCCCAGATGATGATAGGGCA
GCCTCAGACCAGGAGAACATGGACCCAATCCTC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC223376 representing NM_025049
Red=Cloning site Green=Tags(s)

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MLSGIEAAAGEYEDSELRCRVAVEELSPGGQPRRRQALRTAELSLGRNERREMLRLQAPGPAGRPRCFP
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GPRPRDFVTISPVQPEERRLRAATRVPDITLVKRPVEPQAGAEPSTEAPRWPLPVKRLSLPSTKPQLSEE
QAAVLRAVLKQSQSIFFTGSAGTGKSYLLKRIKLSLPTGTVATASTGVAACHIGGTTLHAFAGIGSGQAP
LAQCVALAQRPGVVRQWLNCRQLVIDEISMVEADLFDKLEAVARAVRQONKPFGGIQLIICGDFLQLPPV
TKGSQPPRFQSKSWKRCVPVLELTKVWRQADQTFISLLQAVRLGRCSDVTRQLQATASHKVGDRGI
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RGLVNGARGVVVGFEAEGRGLPQVRFLCGVTEVIHADRWTVQATGGQLLSRQQLPLQLAWMSIHKSQGM
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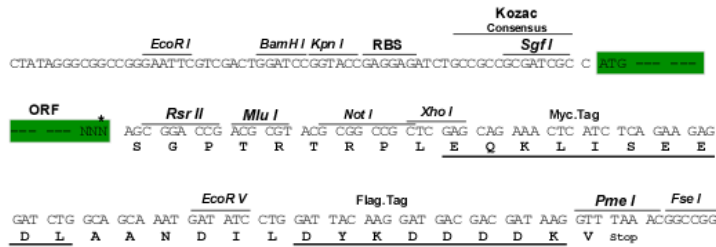
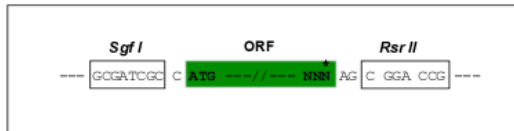
SGPTRRRLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg4608_g05.zip

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_025049

ORF Size: 1923 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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: [NM_025049.4](#)

RefSeq Size: 2659 bp

RefSeq ORF: 1926 bp

Locus ID: 80119

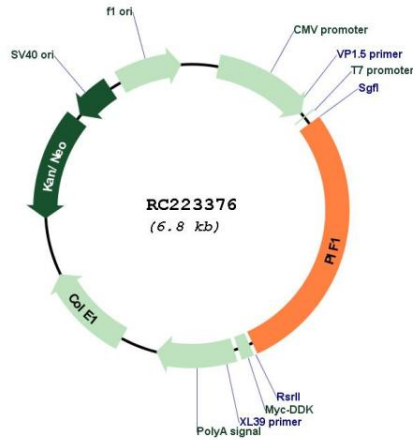
UniProt ID: [Q9H611](#)

Cytogenetics: 15q22.31

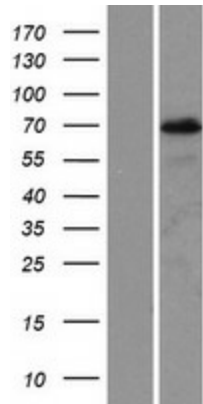
MW: 69.6 kDa

Gene Summary: This gene encodes a DNA-dependent adenosine triphosphate (ATP)-metabolizing enzyme that functions as a 5' to 3' DNA helicase. The encoded protein can resolve G-quadruplex structures and RNA-DNA hybrids at the ends of chromosomes. It also prevents telomere elongation by inhibiting the actions of telomerase. Alternative splicing and the use of alternative start codons results in multiple isoforms that are differentially localized to either the mitochondria or the nucleus. [provided by RefSeq, Nov 2013]

Product images:



Circular map for RC223376



Western blot validation of overexpression lysate (Cat# [LY410927]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223376 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).