

Product datasheet for **RC239376**

PIF1 (NM_001286497) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIF1 (NM_001286497) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PIF1
Synonyms:	C15orf20; PIF
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>RC239376 representing NM_001286497
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCTCTCGGGCATAGAGCGGGCGGAGGGGAATATGAGGACTCGGAGCTGCGGTGCCGCTGGCTGTGG
AGGAGCTGAGCCCGGGCGGGCAGCCGCGAAGGCCAGGCCCTGCGCACCGCGGAGCTGAGCCTGGGTCG
CAACGAGCGCCGCGAGTTGATGCTGCGGCTGCAAGCGCCAGGGCCCGGGGGCGGCCGCGCTGCTTTCT
CTGCGCGCCGCGCGCTCTTACGCGTTTCGCGAGGGCCGGGCGCAGCACCTGCGGCTCCCCGCCACG
ACACCCCGGGGCGGGCAGTGCAGCTGCTGCTCTCGGACTGCCCCCAGACCGCTGCGCCGTTCT
GCGCACATTGCGCCTCAAGCTGGCTGCGGCCCGGGTCCCGGGCCGGCTCCGCCGAGCGCAGCTGCTG
GGCCCGCGGCCCGGACTTCGTACCATCAGCCCTGTGCAGCCGAGGAGCGGGCGCTCAGGGCGGCCA
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CTAGCCAGTGTGTGGCCCTGGCCCAAAGGCCAGGCGTGCAGCAGGGCTGGTGAAGTCCAGCGGTTGG
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ACCAAGGGCTCCAGCCCCACGGTTCTGCTCCAGTCCAAGAGCTGGAAGAGGTGTGTCCAGTGACCC
TGGAGCTGACCAAGGTGTGGAGGCAGGCAGACCTTCATCTCTCTACTGCAGGCCGTGAGGCTAGG
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CAGGTAAGGTACACAGATTTGAGGCTATGGACAGCAACCCTGAGCTGGCCAGTACCCTGGATGCCAGTG
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GCTCCTCAGTCGGCAGCAGCTGCCCTCCAGCTGGCCTGGCGATGTCCATCCACAAGAGCCAAGGCATG
ACCCTGGATTGTGTGGAGATTTCTTGGGCCGTGTTTGCCAGTGGCCAGGCCATGTGACCCTTTCTC
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CCAAACAGAGAACGGAACCTTAGGTGTGCTCTACAGCTAGGCCAGCCTAGCCCAGCCCAGAACAAACAC
CCTTCAGAGCCTAACCAAGAACATAAGCTGCAAAATGTGACCCATATTTTAAGCTGCTTTTTCAGGGG
ATAAATAGTGTGGGGACAT

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC239376 representing NM_001286497
 Red=Cloning site Green=Tags(s)

MLSGIEAAAGEYEDSELRCRVAVEELSPGGQPRRRQALRTAELSLGRNERREMLRLQAPGPAGRPRCFP
 LRAARLFTRFAEAGRSTLRPAHDTPGAGAVQLLLSDCPPDRLRRFLRTLRLKLAAPGPGPASARAQLL
 GPRPRDFVTISPVOPEERRLRAATRVPD TTLVKRPVEPQAGAEPSTEAPRWLPVKRSLPSTKPQLSEE
 QAAVLRAVLKQSQIFFTGSAGTGKSYLLKRILGSLPPTGTVATASTGVAACHIGGTTLHAFAGIGSGQAP
 LAQCVALAQRPGVRQGWLNCQRLVIDEISMVEADLFDKLEAVARAVRQQNKPFGGIQLIICGDFLQLPPV
 TKGSQPPRFQSKSWKRCVPVLELTKVWRQADQTFISLLQAVRLGRCSDEVTRQLQATASHKVGRDGI
 VATRLCTHQDDVALTNERRLQELPGKVHRFEAMDSNPELASTLDAQCPVSQLLQLKGAQVMLVKNLSVS
 RGLVNGARGVVVGF EA EGRGLPQVRFLCGVTEVIHADRWTVQATGGQLLSRQQLPLQLAWAMSIHKSQGM
 TLDCEISLGRVFA SQAYVALSRARSLQGLRVLDFDPMAVRCDPRVLFHFYATLRRGRSLSLAAEGRGNE
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 INSVWGH

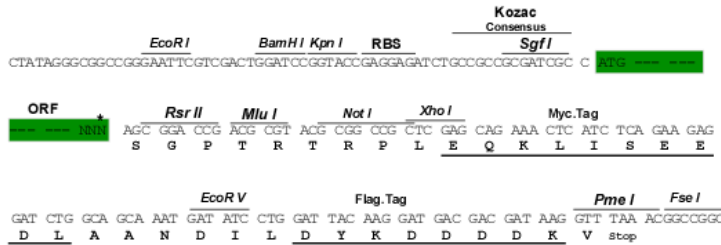
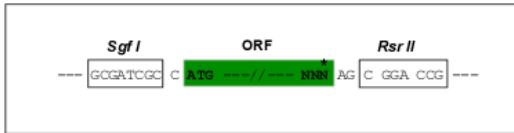
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Restriction Sites:

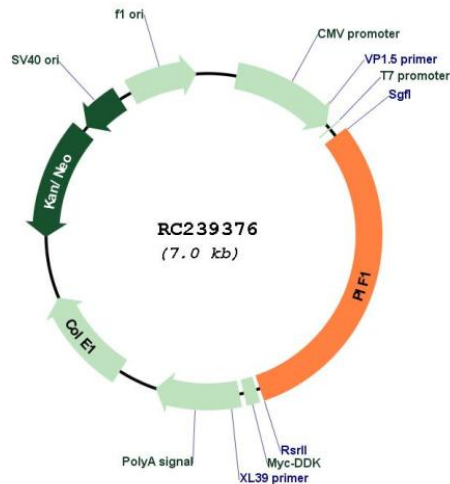
SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001286497

ORF Size: 2121 bp

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: [NM_001286497.2](#)

RefSeq Size: 2285 bp

RefSeq ORF: 2124 bp

Locus ID: 80119

UniProt ID: [Q9H611](#)

Cytogenetics: 15q22.31

MW: 77.6 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]