

Product datasheet for **RG239183**

PIF1 (NM_001286496) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PIF1 (NM_001286496) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PIF1
Synonyms:	C15orf20; PIF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG239183 representing NM_001286496.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCCGGATCGCC
ATGCTCTCGGGCATAGAGGCGGGCAGGGGAATATGAGGACTCGGAGCTGCGGTGCCCGTGGCTGTG
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CGCAACGAGCGCCGCGAGTTGATGCTGCCGCTGCAAGCGCCAGGGCCCGGGGGCGGCCGCTGCTTC
CCTCTGCGCGCCGCGCCTCTTACGCGTTTCGCCGAGGCCGGGCGCAGCACCTGCGGCTCCCGGCC
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ATGGCGGTTTCGCTGTGACCCCGTGTGCTGCACCTTCTATGCCACCTGCGCGGGGCGAGGAGCCTCAGT
CTGGAGTCCCCAGATGATGATGAGGCAGCCTCAGACCAGGAGAACATGGACCCAATCCTC
AGCGGACCGACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
  
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Protein Sequence:

>Peptide sequence encoded by RG239183
 Blue=ORF Red=Cloning site Green=Tag(s)

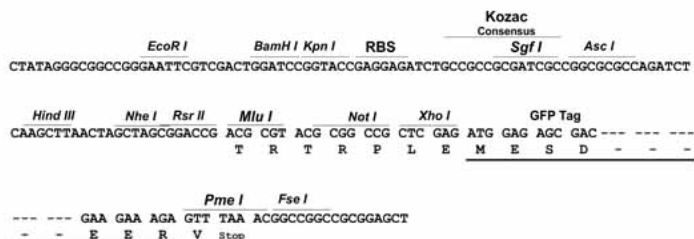
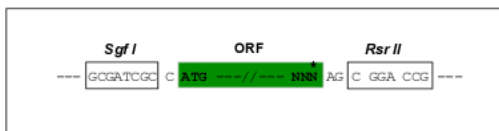
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SEEQAAVLRVAVLKGQSIFFTGSAAGTGSYLLKRIKRLGSLPPTGTVATASTGVAACHIGGTTLHAFAGIGS
GQAPLAQCVALAQRPGVRQWLNQRLVIDEISMVEADLFDKLEAVARAVRQNKPFGGIQLIICGDFL
QLPPVTKGSQPPRFQSKSWKRCVPVTELETKVWRQADQTFISLLQAVRLGRCSDEVTRQLQATASHK
VGRDGI VATR LCTHQDDVAL TNERRLQELPGKVHRFEAMDSNPELASTLDAQPVSQLLQLKLAGQVML
VKNL SVSRGLVNGARGVVVGF EAEGRGLPQVRF LCGVTEVIHADRWTVQATGGQLLSRQQLPLQLAWAM
SIHKSQGM TLDCVEISLGRV FASGQAYVALSRARSLQGLRVLDFDPM AVRCDPRVLHFYATLRRGRSLS
LESPDDDEAASDQENMDPIL
SGPTRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLL
SHVMGYGFYHFGTYPSTYENPFLHAINNGGYTNTRIEKYEDGGVLHVFSFSYRYEAGRVIGDFKVMGTGF
PEDSVIFTDKIIRS NATVEHLHPMGDNDLDGSFTRTFSLRDGGYYSVVDSHMHFKSAIHPSILQNGGP
MFAFRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
  
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Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_001286496

ORF Size: 1923 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).

RefSeq: [NM_001286496.1](#), [NP_001273425.1](#)

RefSeq Size: 2718 bp

RefSeq ORF: 1926 bp

Locus ID: 80119

UniProt ID: [Q9H611](#)

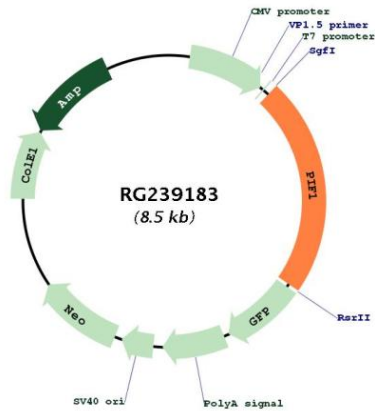
Cytogenetics: 15q22.31

MW: 69.8 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 RG239183