

Product datasheet for **MC203085**

Pif1 (NM_172453) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pif1 (NM_172453) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Pif1
Synonyms:	4631410M14; AI449441
Mammalian Cell Selection:	Neomycin
Vector:	PCMV6-Kan/Neo (PCMV6KN)
E. coli Selection:	Kanamycin (25 ug/mL)



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Fully Sequenced ORF:

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>BC046611
CTGAAAGCAACGAGTCTATCGGATCCTTGAGGACAATCGCTCGCGAATCCTAAGTGCATGTGACCCACC
TTCCAGCGCTCCGAGAACTGCAGCAGAGGACGTTTCTCCTCGCTCCAGAGTGCTTGAATATCTTGGTGG
CATCTTCTGTTACCAGAGACAACCTGTTGACACTAAGAGGTCTGGACAGGATTTCCCGTCACCCGACGCCA
TACCACCTATTACATCTCGATTTTCTGTGACTTATGCGCTCCGGTCTCTGCACGCCTGCAGAGGCATTGG
AGATGCCCTTAGCACAGAGGCGGCGACCGATGAATGTGACGATGCGGAGCTCCGGTGCCGGGTAGCCGT
GGAGGAGCTGAGTCTGGAGGGCAACCTCGAAGCGCCAGGCCCTGCGCGCCGACAGCTGAGCCTAGGT
CGAAACGAAACGAGTGAATTAATGCTGCGACTGCAGGCACCGGGACCCACGGGGCGGCCACGCTGTTCC
CGCTACGCGCCGTGCGCCTCTTACCCGCTTCGCTGCGACTGGGCGCAGCACGTTGCGGCTCCCCACCGA
TGGAGTCCCTGGAGCTGGCTCAGTGCAACTGCTCCTCTCCGACTGTTCCCGGAGCGCTTGCGCCGATTC
CTGCGCACGCTGCGCCTGAAGCTGGCGTTGCCCTGGGCGGGACCCGCTCTGCCCGCACAGTTGC
TCGGCCCGCGGCCCGAGACTTTGTACCATCAGTCCAGTGCAGCCAGAGGAACTGCAGCGTGTGCAGC
CACCAAGGCTCCAGATTCTGCGTGGAAAAGCGGCCAATGGAATCCAGACTAGTACGGAAGCTCCAAGG
TGGCCCTGCCTGTGAAGAAGCTGCGCATGCCCTCCACCAAACCGAAGCTTTCTGAAGAGCAGGCCGCTG
TGCTGAGGATGGTTCTGAAAGGCCAGAGCATTTTCTTCACTGGGAGTGCAGGGACAGGAAAGTCTACCT
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TGCCACATTGGGGGACCAACCTTCATGCCTTTCAGGCATCGGCTCAGGCCAGGCTCCCTGGCCAGT
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AAGCCATTTGGAGGATCCAGCTCATCATCTGTGGGACTTCTACAGTTGCCACCAGTACCAAAGGCT
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TGAGGTGTGGAGGCAAGCAGACCAGACCTTCATCTCTACTGCAGGCTGTGAGGTTAGGCAGATGTTCA
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GACTATGTACCCATCAGGATGATGTGGCCCTGACCAACGAGAAGCGGCTGAAGGCACTGCCAGGTGATGT
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CGTGTCTTCAGTTAAAGCTGGGGGCTCAGGTCATGCTGGTGAAGAACTTGGCAGTGTCTCGGGGCTGG
TGAACGGTGCCCGAGGGGTGGTAGTTGGGTTTGGTCCGAAGGGAGAGGGCTCCCCGGGTACGGTTCCT
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CGGCAGCAGCTTCCCTACAGCTGGCCTGGCCATATCCATCCACAAAAGCCAGGGCATGTCTCTGGACT
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CCTCCAGGGTCTTCGTGTGCTGGACTTCGACCCACGGTGGTTCGATGTGACTCCCGAGTGTGCATTTT
TATGCCACCTTGGGCGAGGGCAGGGCCTCAGTCTGGAGTCCCAAGACGATGAGGAGGCAAACTCAGATC
TGGAGAACATGGACCAAATCTCTGACCTCAGCTGAAAGAGAAGCAAACCTTTAGCTTTTTTCTGGG
TCAAGGCCCTGGGAATTAAGTGGGGAGAGGGCTGTGTTTCTTCCCTTATTCAGCCTCTGGTAGGGTTAAG
GGACACAGTTTCCCATCTACTTAAGTAGCATTGCCTCAGTTTACCTATCTCCCGGGGAAATGACTTCC
AGGGTTCAAAGCTAGAAATGGTATGGTACCAGAGGACAAAGCTCTCTACCAAGGGTGGAAACACACAAC
CACAGAGTTCTTTCAGGCTGGAGAGGCAGTGCGGGACAGGGGCTGCATTCAGCAGCAGCAGCAGGAGCAG
CCTGTCTTATTACCCGATTTATTTATTTTGTGTGCTTGTGCACGCACAGCACATTGTACATGTGAAGG
TCAGAGGACAACCTCGAGGAAGTTGGTTTTCTCTTCCCAAGTGTGTTCTGGGGTTAAATTCAGGTCAC
AGGGCTTGGTAGCAGGCCTTATACCCGATGAGCAATCTTGCTACCAGGGTCCGGTCTAATTTTCTTTGT
GTTATTATAACAAAATATAAAGCTGAGTACTTTATAAAAAAATGATTTATTTTAAATATATATGC
TCACAGTTCTAGAAGATGAAGAACACGGAACAGCCTCGTCTCAGCTTGTGGGGTTGACGGTAGCCG
GCACCCGCTGGCGGGGAAACTTGCAGGCAGGATCATGAGAGACAGGCAACAGAAGATGGTATGCTGGG
AAGAGTATTAATCCGTCCATGAGGACAGGACCTCCTTGTCTTGTAGTTACCTCCCATGCAATCCATCTGA
AGGGTTACATCATCTTAACCCTGCTACGCTAGGGACTAAGCTTCCAGTACATAAACCTATAAGGGAAACC
ATCCAAACTATGGCAGGAGCCTAGAGGGGATTCAGGCCAGACACAAGCCCAAGATAGAAGTTAATTACC
TTCACAGCTGCGCTCAGCTAGCACAGCCCAAGTAAACATCATTACAGAGCCGACTGAGAACAGACGCT
GCAAAATGTGCTGGGTTTGGGGAGAGGCCATGTTTAGGATATGGAGATGGATGTTCTCCGTTGTATTTA
TTTAAGCCAAATAAACTGTGAACCGTGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
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Restriction Sites:

RsrII-NotI

ACCN:	NM_172453
Insert Size:	1953 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	<ol style="list-style-type: none">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:	BC046611 , AAH46611
RefSeq Size:	3353 bp
RefSeq ORF:	1953 bp
Locus ID:	208084
UniProt ID:	Q80SX8
Cytogenetics:	9 C
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longest protein-coding transcript. Variants 1-3 encode the same protein. Sequence Note: The RefSeq transcript and protein were derived from genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.</p>