

Product datasheet for MR202183

Ppif (NM_134084) Mouse Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
Product Name: Ppif (NM_134084) Mouse Tagged ORF Clone
Tag: Myc-DDK
Symbol: Ppif
Synonyms: AW457192; CyP-D; CyP-F; CypD; PPlase
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
ORF Nucleotide Sequence: >MR202183 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCTAGCGCTGCGTTGCGGCCCGCTGCTCGGTCTGCTCTCCGGCCCGCTCCGCGCCGCTGCTCC
 TCTCCGCGACCCGTACCTGCAGCGACGGCGGAGCCCGCGCGCAACTCTTCTCCGGGAACCCGCTCGT
 GTACTTGGACGTGGGCGCGATGGACAGCCGCTCGGCCGCTGGTGTGGAGTTAAAGGCAGATGTCGTG
 CCAAAGACTGCAGAGAACTTCAGAGCCCTATGCACTGGTGAAGGGCTTTGGCTACAAAGGCTCCACCT
 TCCACAGGTGATCCAGCCTTCATGTGCCAGGCTGGCGACTTACCAACCACAATGGCACAGGAGGGAG
 GTCCATCTACGGAAGCCGCTTCCCGACGAGAATTCACACTGAAGCATGTGGGGCCAGGTGTCCTGTCC
 ATGGCGAAGCAGGCCCAACACCAATGGCTCTCAGTTCTTTATCTGCACGATAAAGACAGACTGGCTAG
 ATGGCAAGCATGTCGTGTTGGCCATGTCAAAGAGGGCATGGATGTTGTGAAGAAAATAGAATCTTTCGG
 CTCAAAAAGTGGGAAGACGCTAAGAAGATTGTCATCACAGACTGTGGCCAGTTGAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR202183 protein sequence
 Red=Cloning site Green=Tags(s)

MLALRCGPRLGLLSGPRAPLLL SATRTCSDGGARGANSSSGNPLVYLDVGDGQPLGRVVLELKADV
 PKTAENFRALCTGEKFGYKGFHHRVIPAFMCQAGDFTNHNGTGGRSIYGSRFPDENFTLKHVGPVLS
 MANAGPNTNGSQFFICTIKTDWLDGKHVVFVGHVKEGMDVVKKIESFGSKSGKTSKKIVITDCGQLS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



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Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_134084

ORF Size: 621 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_134084.1](#), [NP_598845.1](#)

RefSeq Size: 1560 bp

RefSeq ORF: 621 bp

Locus ID: 105675

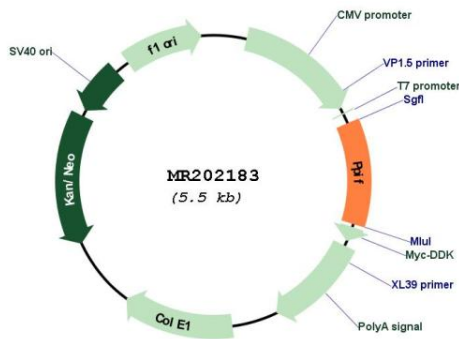
UniProt ID: [Q99KR7](#)

Cytogenetics: 14 A3

MW: 21.7 kDa

Gene Summary: PPlase that catalyzes the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and may therefore assist protein folding. Involved in regulation of the mitochondrial permeability transition pore (mPTP). It is proposed that its association with the mPTP is masking a binding site for inhibiting inorganic phosphate (Pi) and promotes the open probability of the mPTP leading to apoptosis or necrosis; the requirement of the PPlase activity for this function is debated. In cooperation with mitochondrial TP53 is involved in activating oxidative stress-induced necrosis. Involved in modulation of mitochondrial membrane F(1)F(0) ATP synthase activity and regulation of mitochondrial matrix adenine nucleotide levels. Has anti-apoptotic activity independently of mPTP and in cooperation with BCL2 inhibits cytochrome c-dependent apoptosis.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR202183