

## Product datasheet for RC223397

### Cyclophilin F (PPIF) (NM\_005729) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** Cyclophilin F (PPIF) (NM\_005729) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** Cyclophilin F  
**Synonyms:** Cyp-D; CyP-M; CYP3; CypD  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC223397 representing NM\_005729  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCTGGCGCTGCGCTGCGGCTCCCGCTGGCTCGGCCTGCTCTCCGTCGCCGCTCCGTGCCGCTGCGCC  
 TCCCCGCGGCCCGCGCTGCAGCAAGGGCTCCGGCAGCCCGTCTCTCTCTCTCCGGGAACCCGCT  
 CGTGTACCTGGACGTGGACGCCAACGGGAAGCCGCTCGGCCGCGTGGTGTGGAGCTGAAGGCAGATGTC  
 GTCCCAAAGACAGCTGAGAACTCAGAGCCCTGTGCACTGGTGAAGGGCTTCGGCTACAAAGGCTCCA  
 CCTTCCACAGGGTATCCCTTCTTCATGTGCCAGGCGGGGACTTCACCAACCACAATGGCACAGGCGG  
 GAAGTCCATCTACGGAAGCCGCTTCTGACGAGAACTTACACTGAAGCACGTGGGGCCAGGTGTCTGT  
 TCCATGGCTAATGCTGGTCTAACCAACGGCTCCCAGTTCTTCATCTGCACCATAAAGACAGACTGGT  
 TGGATGGCAAGCATGTTGTGTTCCGGTACGTCAAAGAGGGCATGGACGTCGTGAAGAAAATAGAATCTTT  
 CGGCTCTAAGAGTGGGAGGACATCCAAGAAGATTGTCATCACAGACTGTGGCCAGTTGAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC223397 representing NM\_005729  
 Red=Cloning site Green=Tags(s)

MLALRCGSRWLGLLSVPRSVPLRLPAARACSKGSGDPSSSSSSGNPLVYLDVDANGKPLGRVVLELKADV  
 VPKTAENFRALCTGEKFGYKGSFHRVIPSFMCQAGDFTNHNGTGGKSIYGSRFPDENFTLKHVGPVGL  
 SMANAGPNTNGSQFFICTIKTDWLDGKHVVFVGHVKEGMDVVKKIESFGSKSGRTSKKIVITDCGQLS

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV



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**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3828\\_b06.zip](https://cdn.origene.com/chromatograms/mg3828_b06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_005729

**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.

**Note:** Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

**RefSeq:** [NM\\_005729.4](#)

**RefSeq Size:** 2213 bp

RefSeq ORF: 624 bp

Locus ID: 10105

UniProt ID: [P30405](#)

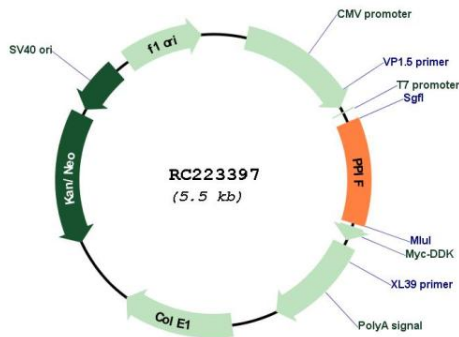
Cytogenetics: 10q22.3

Domains: pro\_isomerase

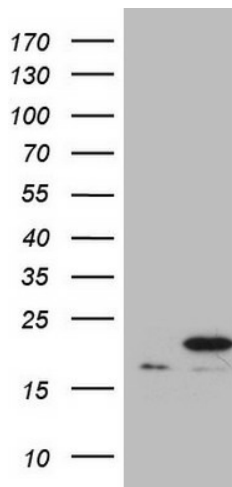
MW: 22.04 kDa

**Gene Summary:** The protein encoded by this gene is a member of the peptidyl-prolyl cis-trans isomerase (PPIase) family. PPIases catalyze the cis-trans isomerization of proline imidic peptide bonds in oligopeptides and accelerate the folding of proteins. This protein is part of the mitochondrial permeability transition pore in the inner mitochondrial membrane. Activation of this pore is thought to be involved in the induction of apoptotic and necrotic cell death. [provided by RefSeq, Jul 2008]

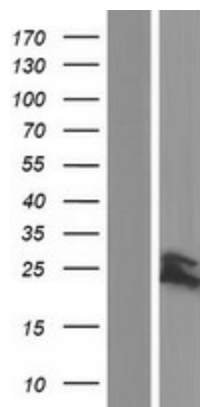
**Product images:**



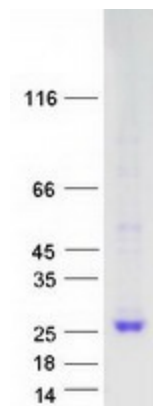
Circular map for RC223397



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PPIF (Cat# RC223397, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PPIF (Cat# [TA809070])(1:2000). Positive lysates [LY417109] (100ug) and [LC417109] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY417109]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC223397 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PPIF protein (Cat# [TP323397]). The protein was produced from HEK293T cells transfected with PPIF cDNA clone (Cat# RC223397) using MegaTran 2.0 (Cat# [TT210002]).