

Product datasheet for **RC202465**

MIPEP (NM_005932) Human Tagged ORF Clone

Product data:

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|---------------------------|------------------------------------------|
| Product Type: | Expression Plasmids |
| Product Name: | MIPEP (NM_005932) Human Tagged ORF Clone |
| Tag: | Myc-DDK |
| Symbol: | MIPEP |
| Synonyms: | COXPD31; HMIP; MIP |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-Entry (PS100001) |
| E. coli Selection: | Kanamycin (25 ug/mL) |



[View online »](#)

**ORF Nucleotide
Sequence:**

>RC202465 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCTGTGCGTCGGAAGGCTGGGCGGCTTGGGAGCCAGAGCAGCAGCTCTGCCGCCCGCCGGGCGGGCC
 GGGGAAGCCTCGAAGCCGGGATCCGGGCCGAAGGGTCAGCACCCAGCTGGTCTCCCGTGGGCGCCGCTT
 CAATGTCAAGCCCAGGGCAGCCGCTTGGACCTGTTCCGGCAGCGCCGGGTCTTTTTGGAGTTCCTGAG
 CTGAGTGCCTCAGAAGGATTTTCATATTGCAACAAGAAAAGCCTTGAGAAAAGACAGAATTGCTTGTGGACC
 GTGCATGTTCCACCCACCTGGGCCAGACCGTGTGATCTTCGATGAGCTCTCGGATTCCTTATGCAG
 AGTGGCCGACTTGGCTGATTTTGTGAAAATCGCTCACCTGAGCCAGCATTAGAGAAAGTGCAGGAAAGAA
 GCTTGTAGAAGTATTGGCACCATGGTAGAGAAGTTGAACACAAAATGTGGATTTATATCAAAGTTTGCAA
 AATTACTAGCTGATAAAAACTTGTGGATTCCTTGATCCAGAAAACAGGCGAGTGGCTGAACTGTTTAT
 GTTTGATTTTGAATTAGTGAATCCATCTAGACAAAAGAAAGCGTAAAAGAGCAGTGGACTCAATGTT
 AAAATCTTGGATTTGAGTAGTACATTTCTATGGGAACCAATTTCCCAACAAGATTGAGAAGCATCTCT
 TACCAGAACACATTCGTGTAACCTTACATCTGCTGGGGATCATATCATAAATGATGGTCTCCACGAGA
 ATCACCAGATGACTTGGTGCAGAGAAGCTGCTTATAAAATTTTCTTTATCCCAATGCTGGTCAATTGAAA
 TGTTTAGAAGAATTGCTCAGCAGCAGAGATCTTCTGGCAAAGTTGGTGGGGTATTCCACGTTTTCTCACA
 GGGCTCTCCAAGGAACGATAGCTAAAAATCCAGAGACTGTCATGCAGTTCCTTGA AAAACTATCTGACAA
 ACTTTCTGAAAGAACTCTGAAAGATTTTGGATGATACGAGGGATGAAAATGAACTGAATCCTCAAAT
 TCCGAAGTAATGCCCTGGGACCCCTTACTACAGTGGTGTGATTCGTGCAGAAAGGATAAATTTGAGC
 CCAGCCTATATTGCCGTTTTTCTCTTGGAGCATGCATGGAAGCCTGAATATTTTGTAAACAGACT
 GTTGGGGATTTTCAATTATATGCAGAGCAGCCTGCAAAAAGGAGAGGTGGAGCGAAGATGTCGAAAACCTG
 GCTGTTGTTTCAATCTGAAGGATTGTTGGGGTACATTTACTGTGATTTTTTTCAGCGAGCAGACAAAAC
 CACATCAGGATTGCCATTTCACTATCCGTGGAGGCAGACTAAAGGAAGATGGAGACTATCAACTCCCAGT
 TGTAGTTCTTATGCTGAATCTTCCCGTTCCTCAAGGAGTTCTCAACTTTGCTAACTCCTGGCATGATG
 GAAAATCTTTCCATGAAATGGGACATGCCATGCATTCAATGCTAGGACGTAAGTACCAACACGTC
 CTGGGACCAGGTGCCCTACTGATTTTGGTGGGTTCTTCTATTCTGATGGAGTACTTTGCAATGATTA
 TCGAGTAGTTAACCAATTTGCCAGACATTATCAGACTGGACAGCCACTGCCAAAAATATGGTGTCTCGT
 CTTTGTGAATCTAAAAAGTTTTGTGCTGCAGCTGATATGCAACTCAGGTCTTTTATGCCACTCTGGATC
 AAATCTACCATGGGAAGCATCCCCTGAGGAATCAACCACAGACATTCTCAAGGAAACACAAGAGAAATT
 CTATGGCTACCATATGTTCCAAATACTGCCTGGCAGCTGCGATTAGCCACCTCGTGGGGTATGGTGTCT
 AGATATTACTCTTACCTCATGTCCAGAGCGGTCCCTCCATGGTTTGAAGGAGTGTCTTACAGGATC
 CTTTCAACAGGGCTGCCGGGAGCGCTATCGCAGGGAGATGCTGGCCACGGTGGAGGCAGGGAGCCCAT
 GCTCATGGTTGAAGGTATGCTTCAGAAGTGTCTTCTGTTGATGACTTCGTAAGTGCCCTCGTTCCGAC
 TTGGATCTGGACTTCGAAACTTTCTCATGGATTCTGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC202465 protein sequence
Red=Cloning site Green=Tags(s)

MLCVGRLGGLGARAALPPRRAGRGSLEAGIRARRVSTSWSPVGAANVVKPQGSRLDLFGERRGLFVPE
 LSAPEGFHIAQEKALRKTELLVDRACSTPPGPQTVLIFDELSDSL CRVADLADFVKIAHPEPAFREAAEE
 ACRSIGTMVEKLNNTVDLYQSLQKLLADKLLVDSLDPETRRVAELFMDFEISGIHLDKERKRAVDLNV
 KILDLSSTFLMGNTFNPKEKHLLEPHIRRNFTSAGDHIIDGLHAESPDDL VREAAYKIFLYPNAGQLK
 CLEELLSSRDLLAKLVGYSTFSHRALQGTIAKNPETVMQFLEKLSDKLSERTLKDFEMIRGMKMLNPQN
 SEVMPWDPYYSGVIRAERYNIEPSLYCPFFSLGACMEGLNILLNRLGLISL YAEQPAKGEVWSEVDRKL
 AVVHESEGLLGYIYCDFQRADKPHQDCHFTIRGGRLKEDGDYQLPVVVLMLNLRSSRSPTLLTPGMM
 ENLFHEMGMHMSMLGRTRYQHVTGTRCPTDFAEVPSILMEYFANDYRVVNQFARHYQTGQPLPKNMVSR
 LCESKKVCAAADMLQVYATLDQIYHGKHLRNSTTDLKETQEKFYGLPYVPNTAWQLRFSHLVGYGA
 RYYSYLSRAVASMVWKECFLQDPFNRAAGERYRREMLAHGGGREPMLMVEGMLQKCPVDDFVSALVSD
 LDLD FETFLMDSE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6211_g04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_005932

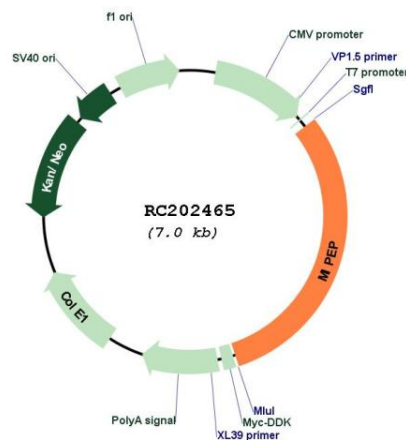
ORF Size: 2139 bp

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](#)

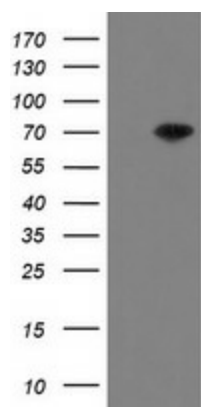
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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| 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: | <u>NM_005932.3</u> |
| RefSeq Size: | 2446 bp |
| RefSeq ORF: | 2142 bp |
| Locus ID: | 4285 |
| UniProt ID: | <u>Q99797</u> |
| Cytogenetics: | 13q12.12 |
| Domains: | Peptidase_M3 |
| Protein Families: | Druggable Genome, Protease |
| MW: | 80.6 kDa |
| Gene Summary: | The product of this gene performs the final step in processing a specific class of nuclear-encoded proteins targeted to the mitochondrial matrix or inner membrane. This protein is primarily involved in the maturation of oxidative phosphorylation (OXPHOS)-related proteins. This gene may contribute to the functional effects of frataxin deficiency and the clinical manifestations of Friedreich ataxia. [provided by RefSeq, Jul 2008] |

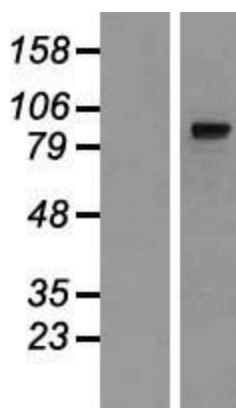
Product images:



Circular map for RC202465



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MIPEP (Cat# RC202465, 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-MIPEP (Cat# [TA800258]). Positive lysates [LY416973] (100ug) and [LC416973] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY416973]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC202465 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).