

Product datasheet for **RG201854**

Mitofilin (IMMT) (NM_006839) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mitofilin (IMMT) (NM_006839) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mitofilin
Synonyms:	HMP; Mic60; MICOS60; MINOS2; P87; P87/89; P89; PIG4; PIG52
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG201854 representing NM_006839
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTGCGGGCCTGTCACTTATCGGGTGTGACCGCCGCCAGAGTTGTCTGTGGGAAGTTTGTCC
 TCCGTCCATTGCGACCATTGCCGCAGATACTCTACTTCAGGCAGCTCTGGGTTGACTACTGGCAAAATTGC
 TGGAGCTGGCCTTTTGTGGTGGAGGATTGGTGGCACTATCCTATATGCCAAATGGGATCCCAT
 TTCCGGGAAAGTGTAGAGAAAACCATACCTTACTCAGACAACTCTTCGAGATGGTCTTGGTCTGCAG
 CTTATAATGTTCCATTGCCAAAGAAATCGATTCACTCGGGTCCACTAAAAATCTCTAGTGTATCAGAAGT
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 GCACCTACAGAAGCGGCTCAAATTTTCTGCAGCAGGTGATACCCTGTCGGTCCAGCCCTGCAGTTC
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 TCACTCTGCAGGCTATTGCAGCTCAGAATGCTGCGGTCCAGGCTGTCAATGCACACTCCAACATATTGAA
 AGCCGCCATTGGACAATTCTGAGATTGCAGGCGAGAAGAAATCTGCTCAGTGGCGCACAGTGGAGGGTGCA
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 CTGCAGAAACACCTACTATCCCCTGGGTAGTGGGTTGAGGCCATCAAAGCCAACCTGTTCTGATAATGA
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 CTTAGAGCCCCTTCTATGCTGTTCAAAAAGTGGCCGAAGGGTAGCAATGATTGATGAAACCAGAAATA
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 CCCAGAGCTCTGCCCTGAGGATATAAACACATTTAAATTAAGTGTGATGCTTCTATTGCATTGAGCAT
 GGTGATCTGGAGCTAGCAGCAAAGTTTGTCAATCAGCTGAAGGGGAATCCAGACGAGTGGCACAGGACT
 GGCTGAAGGAAGCCGAATGACCCTAGAAACGAAACAGATAGTGGAAATCCTGACAGCATATGCCAGCGC
 CGTAGGAATAGGAACCACTCAGGTGCAGCCAGAG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG201854 representing NM_006839
 Red=Cloning site Green=Tags(s)

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MLRACQLSGVTAQAQSCLCGKFVLRPLRPCRRYSTSGSSGLTTGKIAGALLFVGGGIGGTILYAKWDSH
FRESVEKTI PYSDKL FEMVLGPAAYNVPLPKKSIQSGPLKISSVSEVMKESKQPASQLQKQKGDTPASAT
APTEAAQIIISAAGDTLSVPAPAVQPEESLKTDPHEIGEGKPTPALSEEASSSSIRERPPPEVAARLAQQE
KQEQVKIESLAKSLEDALRQTASVTLQAIAAQNAAVQAVNAHSNILKAAMDNSEIAGEKKS AQWRTVEGA
LKERRKAVDEAADALLKAKEELEKMKSVIENAKKKEVAGAKPHITAAEGKLNMIVDLDNVVKKVQAAQS
EAKVVSQYHEL VVQARDDFKRELD SITPEVLPGWKGMSVSDLADKLDSTDDLNSL IAHARRIDQLNRELA
EQKATEKHITL ALEKQKLEEKRAFDS AVAKALEHHRSEIQAEQDRKIEEVRDAMENEMRTQLRRQAAA H
TDHLRDVLRVQEQLKSEFEQNLSEKLSEQELQFRRLSQEQVDNFTLDINTAYARLRGIEQAVQSHAVAE
EEARKAHQLWLSVEALKYSMTSSAETPTIPLGSAVEAIKANCSDFEFTQALTAAPPESL TRGVYSEET
LRARFYAVQKLARRVAMIDETRNSLYQYFLSYLQSLLLFPPQQLKPPPELCPEDINTFKLLSYASYCIEH
GDLELAAKFVNQLKGESRRVAQDWLKEARMTLETKQIVEILTAYASAVGIGTTQVQPE
```

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006839

ORF Size: 2274 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_006839.1](#), [NP_006830.1](#)

RefSeq Size: 2697 bp

RefSeq ORF: 2277 bp

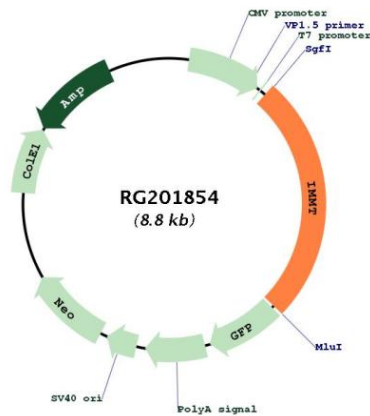
Locus ID: 10989

UniProt ID: [Q16891](#)

Cytogenetics: 2

Gene Summary: Component of the MICOS complex, a large protein complex of the mitochondrial inner membrane that plays crucial roles in the maintenance of crista junctions, inner membrane architecture, and formation of contact sites to the outer membrane. Plays an important role in the maintenance of the MICOS complex stability and the mitochondrial cristae morphology (PubMed:22114354, PubMed:25781180).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG201854