

Product datasheet for **RG216114**

Mitofilin (IMMT) (NM_001100169) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mitofilin (IMMT) (NM_001100169) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	IMMT
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:

>RG216114 representing NM_001100169
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGCTGCGGGCCTGTCACTTATCGGGTGTGACCGCCGCCAGAGTTGTCTGTGGGAAGTTTGTCC
 TCCGTCCATTGCGACCATGCCGAGATACTCTACTTCAGGCAGCTCTGGGTTGACTACTGGCAAAATTGC
 TGGAGCTGGCCTTTTGTGGTGGAGGATTGGTGGCACTATCCTATATGCCAAATGGGATCCCAT
 TTCCGGGAAAGTGTAGAGAAAACCATACCTTACTCAGACAACTCTTCGAGATGGTTCTTGGTCTGCAG
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 CTCTGCAGGCTATTGCAGCTCAGAATGCTGCGGTCCAGGCTGCAATGCACACTCCAACATATTGAAGC
 CGCCATGGACAATTCTGAGATTGCAGGCGAGAAGAAATCTGCTCAGTGGCGCACAGTGGAGGGTGCATTG
 AAGGAACGCAGAAAGGCAGTAGATGAAGCTGCCGATGCCCTTCTCAAAGCCAAAGAAGAGTTAGAGAAGA
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 GCTAAGGTTGATCTCAGTATCATGAGCTGGTGGTCCAAGCTCGGGATGACTTAAACGAGAGCTGGACA
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 CACCCAAGCTTTAACCGAGCTATCCCTCCAGAGTCCCTGACCCGTGGGGTGTACAGTGAAGAGACCCCT
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 AGAGCTCTGCCCTGAGGATATAAACACATTTAAATTAAGTGTATGCTTCTATTGCAATTGAGCATGGT
 GATCTGGAGCTAGCAGCAAAGTTTGTCAATCAGCTGAAGGGGAATCCAGACGAGTGGCAGCAGGACTGGC
 TGAAGGAAGCCGAATGACCCTAGAAACGAAACAGATAGTGAAATCCTGACAGCATATGCCAGCGCCGT
 AGGAATAGGAACCACTCAGGTGCAGCCAGAG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG216114 representing NM_001100169
 Red=Cloning site Green=Tags(s)

MLRACQLSGVTAQAQSCLCGKFVLRPLRPCRRYSTSGSSGLTTGKIAGAGLLFVGGGIGGTILYAKWDSH
 FRESVEKTIPYSDKLFEMVLGPAAYNVPLPKKSIQSGPLKISSVSEVMKESKQPASQLQKQKGDTPASAT
 APTEAAQIIISAAGDTLSVPAPAVQPEESLKTDPHEIGEGKPTPALSEASSSIRERPPEEVAARLAQOEK
 QEYVKIESLAKSLEDALRQTASVTLQAIQAQNAAVQAVNAHSNILKAAMDNSEIAGEKKSQAQWRTVEGAL
 KERRKAVDEAADALLKAKEELEKMKSVIENAKKKEVAGAKPHITAAEGKLNMIIVLDLNVVKKVQAAQSE
 AKVVSQYHELVVQARDDFKRELDSTPEVLPGWKGMSVSDLADKLSTDDLNSLIAHAHRRIDQLNRELAE
 QKATEKQHITLALAEKQKLEEKRAFDSAVAKALEHHRSEIQAEQDRKIEEVRDAMENEMRTLRRQAAAHT
 DHLRDVLRVQEQLKSEFEQNLSEKLSEQELQFRRLSQEQVDFNLTLDINTAYARLRGIEQAVQSHAVAE
 EARKAHQLWLVEALKYSMTSSAETPTIPLGSAVEAIKANCSDNEFTQALTAAPPELTRGVYSEETL
 RARFYAVQKLARRVAMIDETRNSLYQYFLSYLQSLLLFPPQQLKPPPELCPEDINTFKLLSYASYCIEHG
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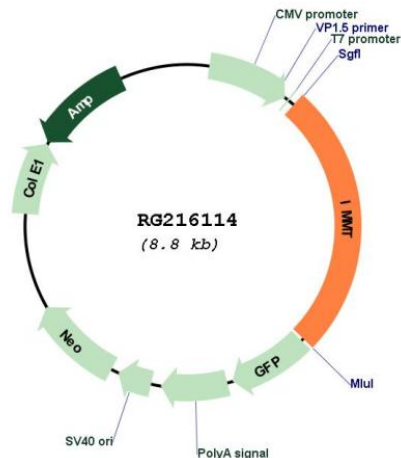
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:


ACCN: NM_001100169

ORF Size: 2271 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_001100169.1](#), [NP_001093639.1](#)

RefSeq Size: 3015 bp

RefSeq ORF: 2274 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]