

Product datasheet for **RG214409**

MIRO1 (RHOT1) (NM_001033568) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MIRO1 (RHOT1) (NM_001033568) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MIRO1
Synonyms:	ARHT1; MIRO-1; MIRO1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG214409 representing NM_001033568
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGAAAGACGTGCGGATCCTGCTGGTGGGAGAACCTAGAGTTGGGAAGACATCACTGATTATGTCTC
 TGGTCAGTGAAGAATTTCCAGAAGAGGTTCTCCCGGGCAGAAGAAATCACCATTCCAGCTGATGTCAC
 CCCAGAGAGAGTTCCAACACACATTGTAGATTACTCAGAAGCAGAACAGAGTGATGAACAACTTCATCAA
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 CAAGTCGATGGATTCTCTCATAAATGAAAGAACAGACAAAGACAGCAGGCTGCCTTAATATTGGTTGG
 GAACAAATCTGATCTGGTGAATATAGTAGTATGGAGACCATCCTTCTATTATGAACAGTATACAGAA
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 AAGCTGTTCTTCATCCTACAGGGCCCTGTACTGCCAGAGGAGAAGGAGATGAAACCAGCTTGATAAA
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 GAAAACATATAAGTGATGGTGTGGCTGACAGTGGGTTGACCTGAAAGGTTTTCTTTTTACACACACT
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 ATACAGTATTTACCTACTGATTTCTGCAGGAAACACAAAATGCCTCCACCACAAGCCTTCACTTGCAT
 ACTGCTGATGCCCCAGTAAGGATATCTTTGTTAAATTGACAACAATGGCCATGTATCCAGAGGATCATT
 ACAGAGACAGACTCTCCGAGACATGGGCCACACTGATAGAATAGAGAATTTGAGAAAAATCTGGGTCTT
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 ACGTGACACAAGCTGACCTCAAGAGCTCCACGTTTTGGCTTCGAGCAAGTTTTGGTGTACTGTTTTTGC
 AGTTTTGGGCTTTGCTATGTACAAAGCATTATTGAAACAGCGA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG214409 representing NM_001033568
Red=Cloning site Green=Tags(s)

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MKKDVRILLVGEPRVGKTSLIMSLVSEEFPEEVPRAEEITIPADVTPERVPTHTIVDYSEAEQSDEQLHQ
EISQANVICIVYAVNNKHSIDKVTSRWIPLINERTDKDSRLPLILVGNKSDLVEYSSMETILPIMNQYTE
IETCVECSAKNLKNISELFYYAQKAVLHPTGPLYCPEEKEMKPACIKALTRIFKISDQDNDGTLNDAELN
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VVCLVYVDSNPKSFEYCARIKQHFMSRIPCLIVAASDLHEVKQEYSISPTDFCRKHKMPPPQAFTCN
TADAPSKDIFVKLTTMAMPEDHYDRDLSRDMGHTDRIENLRKIWVFLKTAHFARLRMCTCNRCTFCIC
QNFLNSDLLQSVKNKIFTAVLNRHVTDADLKSSTFWLRASFGATVFAVLGFAMYKALLKQR
    
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TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001033568

ORF Size: 2073 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_001033568.2](#), [NP_001028740.1](#)

RefSeq Size: 3309 bp

RefSeq ORF: 2076 bp

Locus ID: 55288

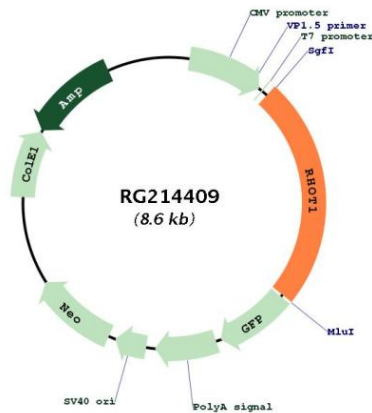
UniProt ID: [Q8IXI2](#)

Cytogenetics: 17q11.2

Protein Families: Transmembrane

Gene Summary: Mitochondrial GTPase involved in mitochondrial trafficking. Probably involved in control of anterograde transport of mitochondria and their subcellular distribution.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG214409