

Product datasheet for **RC209190**

MIRO1 (RHOT1) (NM_018307) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MIRO1 (RHOT1) (NM_018307) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MIRO1
Synonyms:	ARHT1; MIRO-1; MIRO1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC209190 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGAAGAAAGACGTGCGGATCCTGCTGGTGGGAGAACCTAGAGTTGGGAAGACATCACTGATTATGTCTC
 TGGTCAGTGAAGAATTTCCAGAAGAGGTTCTCCCGGGCAGAAGAAATCACCATTCCAGCTGATGTCAC
 CCCAGAGAGAGTTCCAACACACATTGTAGATTACTCAGAAGCAGAACAGAGTGATGAACAACTTCATCAA
 GAAATATCTCAGGCTAATGTCATCTGTATAGTGTATGCCGTTAACAAACAAGCATTCTATTGATAAGGTAA
 CAAGTCGATGGATTCTCTCATAAATGAAAGAACAGACAAAGACAGCAGGCTGCCTTTAATATTGGTTGG
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 AGCCCTTACTCGTATATTTAAAAATCTGATCAAGATAATGATGGTACTCTCAATGATGCTGAACCTAAC
 TTCTTTACAGAGGATTTGTTTCAACACTCCATTAGCTCCTCAAGCTCTGGAGGATGTCAAGAATGTAGTCA
 GAAAACATATAAGTGATGGTGTGGCTGACAGTGGGTTTACCCTGAAAGGTTTTCTTTTTACACACACT
 TTTTATCCAGAGAGGGAGACACGAAACTACTTGGACTGTGCTTCGACGATTTGGTTATGATGATGACCTG
 GATTTGACACCTGAATATTTGTTCCCTCTGCTGAAAATACCTCCTGATTGCACTACTGAATTAATCATC
 ATGCATATTTATTTCTCCAAAGCACCTTGACAAGCATGATTTGGATAGAGACTGTGCTTTGTCACCTGA
 TGAGCTTAAAGGTTTATTTAAAGTTTTCCCTTACATACCTTGGGGCCAGATGTGAATAACACAGTTTGT
 ACCAATGAAAGAGGCTGGATAACCTACCAGGGATTCCTTTCCAGTGGACGCTCACGATTTATTTAGATG
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 ACTTTATGGACAGCAGAATACCTTGCTTAATCGTAGCTGCAAAGTCAGACCTGCATGAAGTTAAACAAGA
 ATACAGTATTTACCTACTGATTTCTGCAGGAAACACAAAATGCCTCCACCACAAGCCTTCACTTGAAT
 ACTGCTGATGCCCCAGTAAGGATATCTTTGTTAAATTGACAACAATGGCCATGTATCCGCACGTGACAC
 AAGCTGACCTCAAGAGCTCCACGTTTTGGCTTCGAGCAAGTTTTGGTGCTACTGTTTTTGCAGTTTTGG
 CTTTGCTATGTACAAAGCATTATTGAAACAGCGA

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

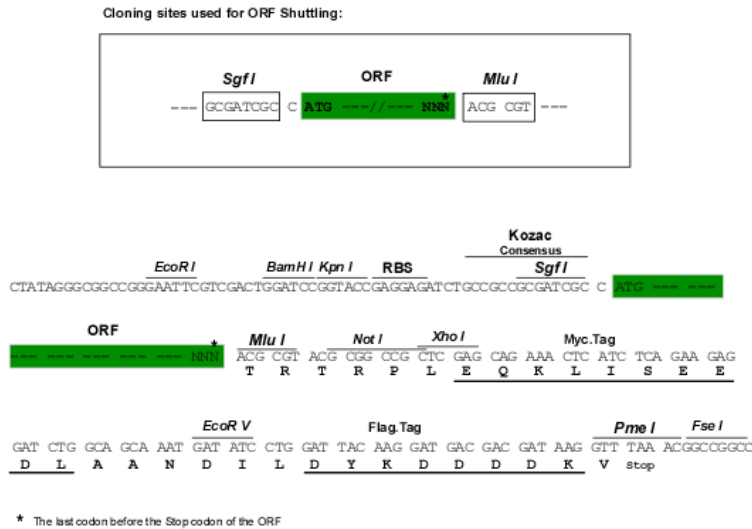
>RC209190 protein sequence
 Red=Cloning site Green=Tags(s)

MKKDVRILLVGEPRVGKTSLIMSLVSEEFPEEVPPRAEITIPADVTPERVPHIVDYSEAEQSDQLHQ
 EISQANVICIVYAVNNKHSIDKVTSRWIPLINERTDKDSRLPLILVGNKSDLVEYSSMETILPIMNQYTE
 IETCVECSAKNLKNISELFYAQKAVLHPTGPLYCPEEKEMKPACIKALTRIFKISDQDNDGTLNDAELN
 FFQRICFNTPLAPQALEDVKNVVRKHISDGVADSGFTLKGFLFLHTLFIQRGRHETTWTVLRFFGYDDDL
 DLTPEYLFPLLKIPPDCTTELNHHAYLFLQSTFDKHDLDRDCALSPDELKGLFKVFPYIPWGPVNNNTVC
 TNERGWITYQGFLSQWTLTTYLDVQRCLYLGYLGYLSILTEQESQASAVTVTRDKKIDLQKKQTRNVFR
 CNVIGVKNCGKSGVLQALLGRNLMRQKKIREDHKSYYAINTVYVYQGKEYLLLDHDISESEFLTEAEIICD
 VVCLVYDVSNPKSFEYCARIKQHFMDSRIPCLIVAASDLHEVKQEYSISPTDFCRKHKMPPQAFTCN
 TADAPSKDIFVKLTTMAMYPHVTQADLKSSTFWLRASFGATVFAVLGFAMYKALLKQR

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018307

ORF Size: 1854 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_018307.4](#)

RefSeq Size: 3140 bp

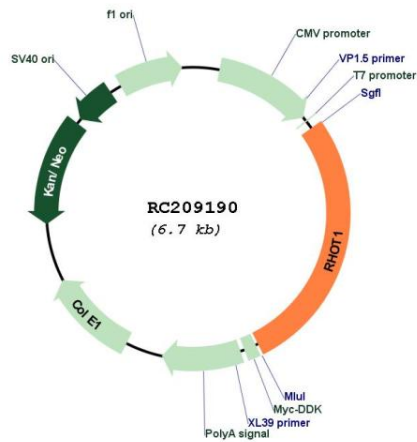
RefSeq ORF: 1857 bp

Locus ID: 55288

UniProt ID: [Q8IXI2](#)

Cytogenetics:	17q11.2
Domains:	EFh, RAS, RHO, RAB
Protein Families:	Transmembrane
MW:	70.8 kDa
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 RC209190