

## Product datasheet for **RC204823**

### **MIRO2 (RHOT2) (NM\_138769) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	MIRO2 (RHOT2) (NM_138769) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MIRO2
Synonyms:	ARHT2; C16orf39; MIRO-2; MIRO2; RASL
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC204823 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGAGCGGGACGTGCGCATCTGTTACTGGCGAGGCCAGGTGGGAAGACGTCGCTGATCCTGTCCC  
 TGGTGGGCGAGGAGTTCCCCGAGGAGTCCCTCCCGCGCGGAGGAGATCACGATCCCCGCGACGTCAC  
 CCCGGAGAAGGTGCCACCCACATCGTGGACTACTCAGAAGCCGAGCAGACGAGGAGCTGCGGGAG  
 GAGATCCACAAGGCAAACGTGGTGTGTGGTGTATGACGTCTCTGAGGAGGCCACCATTGAGAAGATTC  
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 TGCATCCCTCTTCTTCTGGCTCCGGGGCTGCTGGGGTTGTGGGGCCGCCGTGGCCGACGCTCTCAG  
 CTCTCACTCTACAGGCTCTGGTGAAGAGCCAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC204823 protein sequence  
 Red=Cloning site Green=Tags(s)

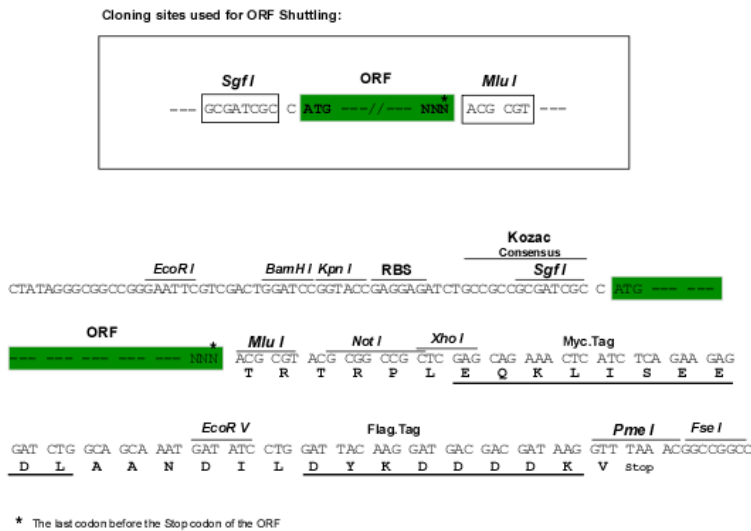
MRRDVRILLLGEAQVGKTSLLSLVGEFPEEVPRAEEITIPADVTPEKVPTHIVDYSEAEQTDEELRE  
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 EPSTTIFTLATMAAFPHLVHAELHPSSFWRGLLGVVGAAVAVALSFLYRVLVKSQ

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mk6673\\_h10.zip](https://cdn.origene.com/chromatograms/mk6673_h10.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_138769

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.

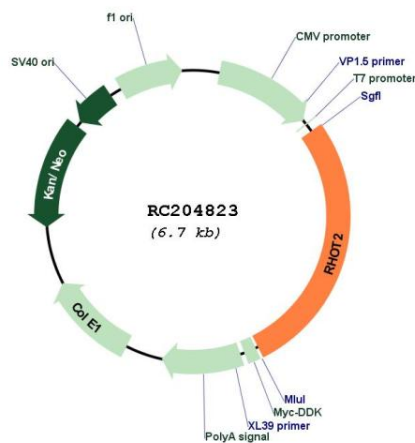
RefSeq: [NM\\_138769.1](#), [NP\\_620124.1](#)

RefSeq Size: 2556 bp

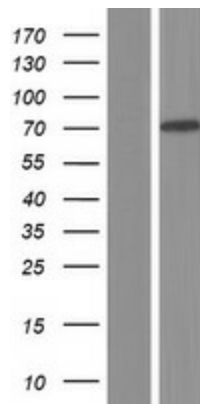
RefSeq ORF: 1857 bp

**Locus ID:** 89941  
**UniProt ID:** [Q8IXI1](#)  
**Cytogenetics:** 16p13.3  
**Domains:** EFh, RAS, RHO, RAB  
**Protein Families:** Transmembrane  
**MW:** 68.1 kDa  
**Gene Summary:** This gene encodes a member of the Rho family of GTPases. The encoded protein is localized to the outer mitochondrial membrane and plays a role in mitochondrial trafficking and fusion-fission dynamics. [provided by RefSeq, Nov 2011]

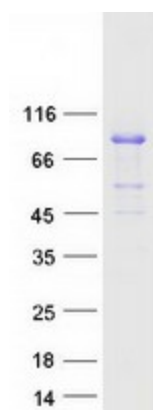
### Product images:



Circular map for RC204823



Western blot validation of overexpression lysate (Cat# [LY408510]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204823 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified RHOT2 protein (Cat# [TP304823]). The protein was produced from HEK293T cells transfected with RHOT2 cDNA clone (Cat# RC204823) using MegaTran 2.0 (Cat# [TT210002]).