

## Product datasheet for **RC200895**

### Melanophilin (MLPH) (NM\_024101) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Melanophilin (MLPH) (NM_024101) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Melanophilin
Synonyms:	SLAC2-A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC200895 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGGGAAGAACTGGATCTTTCCAAGCTCACTGATGAAGAGGCCAGCATGTCTTGAAGTTGTTCAAC  
 GAGATTTTGACCTCCGAAGGAAAGAAGAGAACGGCTAGAGGCGTTGAAGGGCAAGATTAAGAAGGAAAG  
 CTCCAAGAGGGAGCTGCTTTCCGACACTGCCATCTGAACGAGACCCACTGCGCCCGCTGCCTGCAGCCC  
 TACCAGCTGCTTGTGAATAGCAAAGGCAGTGCCTGGAATGTGGCCTCTTACCTGCAAAAGCTGTGGCC  
 GCGTCCACCCGGAGGAGCAGGGCTGGATCTGTGACCCCTGCCATCTGGCCAGAGTCGTGAAGATCGGCTC  
 ACTGGAGTGGTACTATGAGCATGTGAAAGCCCGCTTCAAGAGGTTGGAAGTCCAAAGGTCATCCGGTCC  
 CTCACCGGGCGGCTGCAGGGTGGAGCTGGGCTGAACTGATATCTGAAGAGAGAAGTGGAGACAGCGACC  
 AGACAGATGAGGATGGAGAACCCTGGCTCAGAGGCCAGGCCAGGCCAGCCCTTTGGCAGCAAAAAA  
 GCGCCTCTCTCGTCCACGACTTCGACTTCGAGGGAGACTCAGATGACTCCACTCAGCCTCAAGGTCAC  
 TCCTGCACCTGTCTCAGTCCCTGAGGCCAGGGACAGCCACAGTCCCTCACAGATGAGTCTGTCTCAG  
 AGAAGGCAGCCCTCACAAAGGCTGAGGGCTGGAGGAGGCTGATACTGGGGCTCTGGGTGCCACTCCCA  
 TCCGGAAGAGCAGCCGACCAGCATCTCACCTTCCAGACACGGCGCCCTGGCTGAGCTTGCCCGCCTGGA  
 GGCTCCCACAGGATGGCCCTGGGACTGCTGCTGCACTCGGGTCGAATGTCATCAGGAATGAGCAGCTGC  
 CCCTGCAGTACTTGGCCGATGTGGACACCTCTGATGAGGAAAGCATCCGGGCTCAGTGTGGCCTCCCA  
 CCATCCAAGCGGAGAGGCCGGGCGTCTTCTGAGAGTCAGATCTTTGAGTGAATAAGCATATTTTACGCT  
 GTGGAATGCCTGCTGACTACCTGGAGAACACAGTTGTGCCTCCCTTGGCAAGGGTCTAGGTCTGGAG  
 TCGCACGGAGGCGGATGTAGAGGAGGAGGCCCTGAGGAGGAAGCTGGAGGAGCTGACCAACCTCAG  
 TGACCAGGAGACCTCGTCCGAGGAGGAGGAAGCCAAGGACGAAAAGGCAGAGCCCAACAGGGACAATCA  
 GTTGGGCTCTCCCCAGGCGGACCCGGAGGTGGGCACGCTGCCATCAAACCAACAGACAGGAAAAA  
 GCCCCAGGACCTGGGGACCCGTCAGTACAACAGGACCACAGATGAGGAGCTGTGAGAGCTGGAGGA  
 CAGAGTGGCAGTGACGGCCTCAGAAGTCCAGCAGGACAGAGAGGAGGTTTTCAGACATTGAATCCAGGATT  
 GCAGCCCTGAGGGCCGAGGGCTCACGGTGAAGCCCTCGGAAAGCCCGGAGGAAGTCAAACCTCCCGA  
 TATTTCTCCCTCGAGTGGCTGGGAACTTGCAAGAGACCAGAGGACCCAAATGCAGACCCTTCAAGTGA  
 GGCCAAGGCAATGGCTGTGCCATCTTCTGAGAAGAAAGTTCAGTAATCCCTGAAAAGTCAAGGTAAA  
 GATGATGATTCTTTTATCGGAAATCAGTGTACCGAGGCTCGCTGACACAGAGAAACCCCAACGCGAGGA  
 AAGGAATGGCCAGCCACACCTTCGCGAAACCTGTGGTGGCCACCAGTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC200895 protein sequence  
 Red=Cloning site Green=Tags(s)

MGKLDL SKL TDEEAQH VLEVVRDFDLRRKEEERLEALKGKIKKESKRELLSDTAHLNETHCARCLQP  
 YQLLVNSKRQCLEGLFTCKSCGRVHPEEQGWICDPCHLARVVKIGSLEWYEHVKARFKRFGSAKIVRS  
 LHGRLQGGAGPELISEERSGDSQTDDEGEPGSEAQAQAQPFSGSKKRLLSVHDFDFEGDSDDSTQPQGH  
 SLHLSSVPEARDSPQSLTDESCSEKAAPHKAEGLEEADTGASGCHSHPEEQPTISPSRHGALAECPG  
 GSHRMALGTAALGSNVIRNEQLPLQYLADVDTSDDEESIRAHVMASHHSKRRGRASSESIQIFELNKHISA  
 VECLLTYLENTVVPPLAKGLGAGVRTEADVEEEALRRKLEELTSNVSDQETSSEEEEEAKDEKAEPNRDKS  
 VGPLPQADPEVGTAAHQTNRQEKSPQDPGDPVQYNRTTDEELSELEDRAVAVTASEVQQAEEVSDIESRI  
 AALRAAGLTVKPSGKPRRKSNIPLPRVAGKLGKRPEDPNADPSSEAKAMAVPYLLRRKFSNSLKSQGG  
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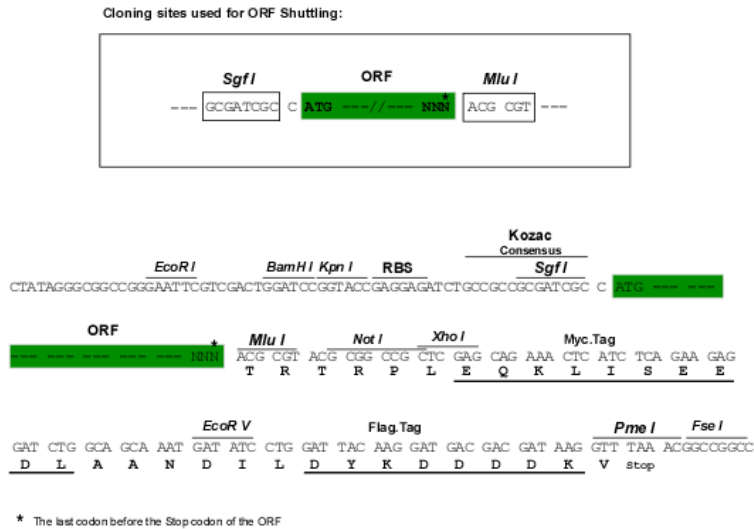
**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6206\\_b05.zip](https://cdn.origene.com/chromatograms/mk6206_b05.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM\_024101

ORF Size: 1800 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\\_024101.7](#)

RefSeq Size: 3787 bp

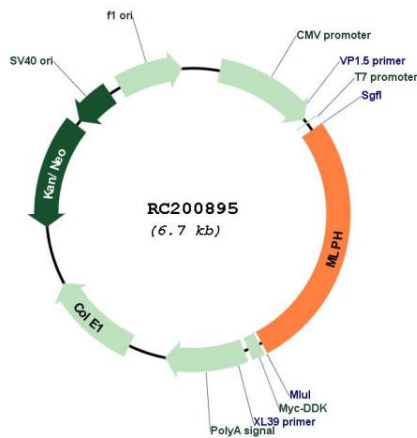
RefSeq ORF: 1803 bp

Locus ID: 79083

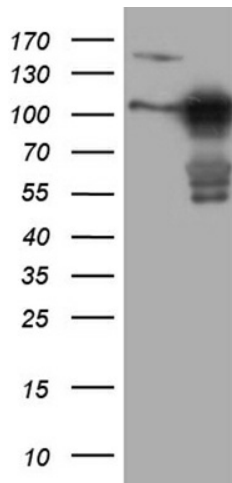
**UniProt ID:** [Q9BV36](#)  
**Cytogenetics:** 2q37.3  
**MW:** 65.9 kDa

**Gene Summary:** This gene encodes a member of the exophilin subfamily of Rab effector proteins. The protein forms a ternary complex with the small Ras-related GTPase Rab27A in its GTP-bound form and the motor protein myosin Va. A similar protein complex in mouse functions to tether pigment-producing organelles called melanosomes to the actin cytoskeleton in melanocytes, and is required for visible pigmentation in the hair and skin. A mutation in this gene results in Griscelli syndrome type 3, which is characterized by a silver-gray hair color and abnormal pigment distribution in the hair shaft. Several alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2013]

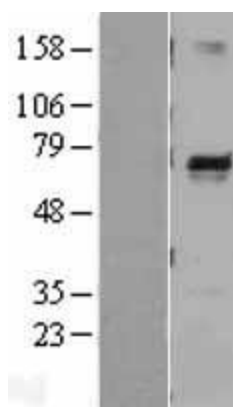
### Product images:



Circular map for RC200895



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MLPH (Cat# RC200895, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MLPH (Cat# [TA808433])(1:2000). Positive lysates [LY402978] (100ug) and [LC402978] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY402978]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC200895 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).