

Product datasheet for **RC238473**

Melanophilin (MLPH) (NM_001281473) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Melanophilin (MLPH) (NM_001281473) 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:

>RC238473 representing NM_001281473
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGGGAAGAACTGGATCTTTCCAAGCTCACTGATGAAGAGGCCAGCATGTCTTGAAGTTGTTCAAC
 GAGATTTTGACCTCCGAAGGAAAGAGGAACGGCTAGAGGCGTTGAAGGGCAAGATTAAGAAGGAAAG
 CTCCAAGAGGGAGCTGCTTTCCGACACTGCCATCTGAACGAGACCCACTGCGCCCGCTGCCTGCAGCCC
 TACCAGCTGCTTGTGAATAGCAAAGGCAGTGCCTGGAATGTGGCCTCTTCACTGCAAAAGCTGTGGCC
 GCGTCCACCCGGAGGAGCAGGGCTGGATCTGTGACCCCTGCCATCTGGCCAGAGTCGTGAAGATCGGCTC
 ACTGGAGTGGTACTATGAGCATGTGAAAGCCCGCTTCAAGAGGTCGGAAGTGCCAAAGTCATCCGGTCC
 CTCCACGGGCGGCTGCAGGGTGGAGCTGGGCCTGAACTGATATCTGAAGAGAGAAGTGAGACAGCGACC
 AGACAGATGAGGATGGAGAACCCTGGCTCAGAGGCCAGGCCAGGCCAGCCCTTTGGCAGCAAATCCCT
 CACAGATGAGTCCTGCTCAGAGAAGGCAGCCCTCACAAGGCTGAGGGCCTGGAGGAGGCTGATACTGGG
 GCCTCTGGGTGCCACTCCATCCGAAGAGCAGCCGACAGCATCTACCTTCCAGACACGGCGCCCTGG
 CTGAGCTCTGCCCGCCTGGAGGCTCCACAGGATGGCCCTGGGGACTGCTGCTGCACTCGGGTCGAATGT
 CATCAGGAATGAGCAGCTGCCCCTGCACTACTTGGCCGATGTGGACACCTCTGATGAGGAAAGCATCCGG
 GCTCACGTGATGGCTCCCAACATTCCAAGCGGAGAGGCCGGCGCTCTTCTGAGAGTCAGGGTCTAGGTG
 CTGGAGTGCACAGGAGGCCGATGTAGAGGAGGAGGCCCTGAGGAGGAAGCTGGAGGAGCTGACCAGCAA
 CGTCAGTGACCAGGAGACCTCGTCCGAGGAGGAGGAAGCCAAGGACGAAAAGGCAGAGCCCAACAGGGAC
 AAATCAGTTGGGCTCTCCCCAGGCGGACCCGGAGGTTTCAGACATTGAATCCAGGATTGCAGCCCTGA
 GGGCCGCAAGGCTCACGGTGAAGCCCTCGGGAAGCCCGGAGGAAGTCAAACCTCCCGATTTTCTCCC
 TCGAGTGGCTGGGAACTTGGCAAGAGACCAGAGGACCCAAATGCAGACCCTTCAAGTGAGGCCAAGGCA
 ATGGCTGTGCCCTATCTTCTGAGAAGAAAGTTCAGTAATTCCCTGAAAAGTCAAGGTAAGATGATGATT
 CTTTTGATCGGAAATCAGTGATACCGAGGCTCGCTGACACAGAGAAACCCCAACGCGAGGAAAGGAATGGC
 CAGCCACACCTTCGCGAAACCTGTGGTGGCCACCACTCC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC238473 representing NM_001281473
 Red=Cloning site Green=Tags(s)

MGKKLDLSKLTDEEAQHVLEVVRDFDLRRKEERLEALKGKIKKESSKRELLSDTAHLNETHCARCLQP
 YQLLVNSKRQCLECGLFTCKSCGRVHPPEEQGWICDPCHLARVVKIGSLEWYYEHVKARFKRFGSAKVIRS
 LHGRLQGGAGPELISEERSGDSQTDDEGEPGSEAQAQAQPFSGKSLTDESCSEKAAPHKAEGLEEADTG
 ASGCHSHPEEQPTSIIPSRHGALAECPGGSHRMALGTAAALGSNVIRNEQLPLQYLADVDTSDEESIR
 AHVMASHHKKRRGRASSESQLGAGVRTEADVEEALRRKLEELTSNVSDQETSSEEEAKDEKAEPNRD
 KSVGPLPQADPEVSDIESRIAALRAAGLTVKPSGKPRRKSNIPLPRVAGKLGKRPEDPNADPSSEAKA
 MAVPYLLRRKFSNSLKSQKDDDSFDRKSVYRGSALTQRNPNARKGMASHTFAKPVVAHQ

TRTRPLE**QKL**ISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_001281473

ORF Size: 1440 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_001281473.2](#)

RefSeq Size: 3427 bp

RefSeq ORF: 1443 bp

Locus ID: 79083

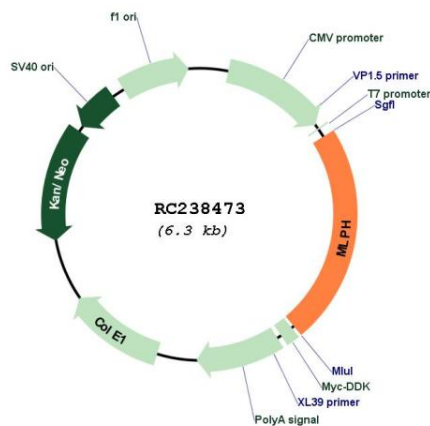
UniProt ID: Q9BV36

Cytogenetics: 2q37.3

MW: 53.1 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 RC238473