

Product datasheet for **RG238473**

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:	TurboGFP
Symbol:	Melanophilin
Synonyms:	SLAC2-A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG238473 representing NM_001281473. Blue=ORF Red=Cloning site Green=Tag(s)

GCTCGTTTAGTGAACCGTCAGAATTTTGTAAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG
GATCCGGTACCGAGGAGATCTGCCGCC**CGCATCGCC**
ATGGGGAAGAACTGGATCTTTCCAAGCTCACTGATGAAGAGGCCAGCATGTCTTGGAAGTTGTTCAA
CGAGATTTTGACCTCCGAAGGAAAGAAGAGGAACGGCTAGAGGCGTTGAAGGGCAAGATTAAGAAGGAA
AGCTCCAAGAGGGAGCTGCTTTCCGACACTGCCCATCTGAACGAGACCCACTGCGCCCGTGCCTGCAG
CCCTACCAGCTGCTTGTGAATAGCAAAGGCAGTGCCTGGAATGTGGCCTCTTCACCTGCAAAAGCTGT
GGCCGCGTCCACCCGGAGGAGCAGGGCTGGATCTGTGACCCTGCCATCTGGCCAGAGTCGTGAAGATC
GGCTCACTGGAGTGGTACTATGAGCATGTGAAAGCCCGCTTCAAGAGGTTCCGAAGTGCCAAGGTCATC
CGGTCCCTCCACGGGCGGCTGCAGGGTGGAGCTGGGCCTGAACTGATATCTGAAGAGAGAAGTGAGAC
AGCGACCAGACAGATGAGGATGGAGAACCTGGCTCAGAGGCCAGGCCAGGCCAGCCCTTTGGCAGC
AAATCCCTCACAGATGAGTCCTGCTCAGAGAAGGCAGCCCTCACAAGGCTGAGGGCCTGGAGGAGGCT
GATACTGGGGCTCTGGGTGCCACTCCCATCCGAAGAGCAGCCGACCAGCATCTCACCTCCAGACAC
GGCGCCCTGGCTGAGCTCTGCCCGCTGGAGGCTCCACAGGATGGCCCTGGGGACTGCTGCTGCACTC
GGTCGAATGTCATCAGGAATGAGCAGCTGCCCTGCAGTACTTGGCCGATGTGGACACCTCTGATGAG
GAAAGCATCCGGGCTCAGTGATGGCCTCCACCATTTCAAGCGGAGAGGCCGGGCGTCTTCTGAGAGT
CAGGGTCTAGGTGCTGGAGTGCACAGGAGGCCGATGTAGAGGAGGAGGCCCTGAGGAGGAAGCTGGAG
GAGCTGACCAGCAACGTCAGTGACCAGGAGACCTCGTCCGAGGAGGAGGAAGCCAAGGACGAAAAGGCA
GAGCCCAACAGGGACAAATCAGTTGGGCTCTCCCCAGGCGGACCCGGAGGTTTCAGACATTGAATCC
AGGATTGCAGCCCTGAGGGCCGAGGGCTCACGGTGAAGCCCTCGGGAAGCCCGGAGGAAGTCAAAC
CTCCCGATATTTCTCCCTCGAGTGGCTGGGAACTTGGCAAGAGACCAGAGGACCCAAATGCAGACCCT
TCAAGTGAGGCCAAGGCAATGGCTGTGCCATCTTCTGAGAAGAAAGTTCAGTAATTCCTGAAAAGT
CAAGGTAAAGATGATGATTCTTTTGATCGGAAATCAGTGTACCGAGGCTCGCTGACACAGAGAAACCCC
AACGCGAGGAAAGGAATGGCCAGCCACACCTTCGCAAACTGTGGTGGCCACCACTCC
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC



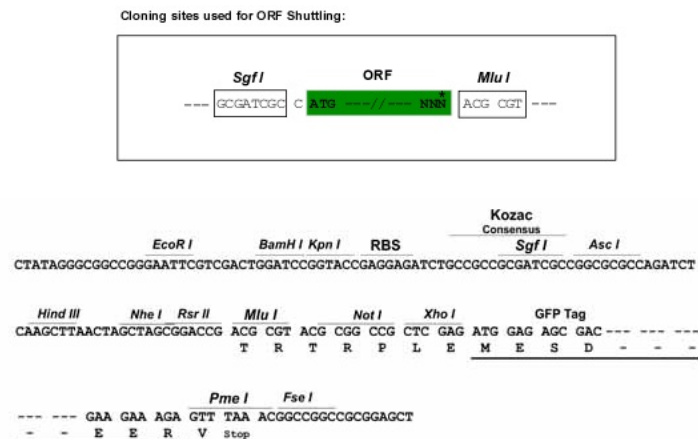
[View online »](#)

Protein Sequence: >Peptide sequence encoded by RG238473
 Blue=ORF Red=Cloning site Green=Tag(s)

MGKKLDLSKLTDEEAQHVLEVVRDFDLRRKEERLEALKGKIKKESSKRELLSDTAHLNETHCARCLQ
 PYQLLVNSKRQCLEGLFTCKSCGRVHPEEQGWICDPCHLARVVKIGSLEWYYEHVKARFRFGSAKVI
 RSLHGRLQGGAGPELISEERSGDSQDQDEGEPSQAQAQPFQSKSLTDESCSEKAAPHKAEGLEEA
 DTGASGCHSHPEEQPTSISSRHGALAECPGGSHRMALGTAALGSNVIRNEQLPLQYLADVDTSDE
 ESIRAHVMASHHSKRRGRASSESQLGAGVRTEADVEEEALRRKLEELTSNVSDQETSSEEEAKDEKA
 EPNRDKSVGPLQADPEVSDIESRIAALRAAGLTVKPSGKPRRKNLPIFLPRVAGKLGKRPEDPNADP
 SSEAKAMAVPYLLRRKFSNSLSQGGKDDSFDRKSVYRGSLTQRNPNARKGMASHTFAKPVVAHQ
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV
 MGYGFYHFGTYPGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED
 SVIFTDKIIRSNAVEHLHPMGDNDLDGSFTRTFLRDGGYYSSVDSHMHFKSAIHPSILQNGGPMFA
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001281473

ORF Size: 1461 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).

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

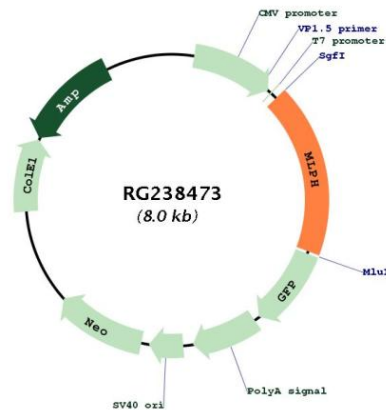
UniProt ID: [Q9BV36](#)

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 RG238473