

## MLPH cDNA

Catalog Number: ATGD0157

### PRODUCT INFORMATION

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**Catalog number**

ATGD0157

**Product type**

cDNA

**Species**

Human

**NCBI Accession No.**

NP\_001035932.1

**Alternative Names**

SLAC2-A

**mRNA Refseq**

NM\_001042467.2

**OMIM**

606526

**Chromosome location**

2q37.3

### PRODUCT SPECIFICATION

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**Formulation**

Lyophilized

**Storage**

Store the plasmid at -20C.

**cDNA Size**

1719bp

**Preparation before usage**

1. Centrifuge at 7000rpm for 1 minute.
2. Carefully open the vial and add 100ul of sterile water to dissolve the DNA. Each tube contains approximately 10ug of lyophilized plasmid.

**Vector description**

This shuttle vector contains the complete ORF. It is inseted BamH I to Hind III. The gene insert contains multiple cloning sites which can be used to easily cut and transfer the gene and recombination site into your expression vector.

**Cloning Vector**

pATGen (puc19-derived cloning vector)

**General Description**

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MLPH 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.

## DATA

### Sequence nucleotides

```
ATGGGGAAGAACTGGATCTTTCCAAGCTCACTGATGAAGAGGCCAGCATGTCTTGGAAGTTGTTCAACGAGATTTTGACC
TCCGAAGGAAAGAAGAGGAACGGCTAGAGGCGTTGAAGGGCAAGATTAAGAAGGAAAGCTCCAAGAGGGAGCTGCTTTCC
GACTGCCCATCTGAACGAGACCCACTGCGCCCGCTGCCTGCAGCCCTACCAGCTGCTTGTGAATAGCAAAGGCAGTGC
CTGGAATGTGGCCTCTTCACCTGCAAAGCTGTGGCCGCGTCCACCCGGAGGAGCAGGGCTGGATCTGTGACCCCTGCCA
TCTGGCCAGAGTCGTGAAGATCGGCTCACTGGAGTGGTACTATGAGCATGTGAAAGCCCGCTCAAGAGGTTTCGGAAGTGC
CAAGGTCATCCGGTCCCTCCACGGGCGGCTGCAGGGTGGAGCTGGGCCTGAACTGATATCTGAAGAGAGAAGTGGAGACA
GCGACCAGACAGATGAGGATGGAGAACCTGGCTCAGAGGCCAGGCCAGGCCAGCCCTTTGGCAGCAAAAAAAGCGC
CTCCTCTCCGTCCACGACTTCGACTTCGAGGGAGACTCAGATGACTCCACTCAGCCTCAAGGTCCTCCCTGCACCTGTCT
CAGTCCCTGAGGCCAGGGACAGCCACAGTCCCTCACAGATGAGTCTGCTCAGAGAAGGCAGCCCTCACAAGGCTGAG
GGCCTGGAGGAGGCTGATACTGGGGCCTCTGGGTGCCACTCCATCCGGAAGAGCAGCCGACCAGCATCTCACCTTCCAG
ACACGGCGCCCTGGCTGAGCTCTGCCCGCTGGAGGCTCCACAGGATGGCCCTGGGGACTGCTGCTGCACTCGGGTTCGA
ATGTCATCAGGAATGAGCAGCTGCCCTGCAGTACTTGGCCGATGTGGACACCTCTGATGAGGAAAGCATCCGGGCTCACG
TGATGGCCTCCACCATTCCAAGCGGAGAGGCCGGGCGTCTTCTGAGAGTCAGGGTCTAGGTGCTGGAGTGCACGAGG
GCCGATGTAGAGGAGGAGGCCCTGAGGAGGAAGCTGGAGGAGCTGACCAGCAACGTCAGTGACCAGGAGACCTCGTCCG
AGGAGGAGGAAGCCAAGGACGAAAAGGCAGAGCCCAACAGGGACAAATCAGTTGGGCCTCTCCCCAGGCGGACCCGGA
GGTGGGCACGGCTGCCATCAAACCAACAGACAGGAAAAAGCCCCAGGACCCTGGGGACCCCGTCCAGTACAACAGGA
CCACAGATGAGGAGCTGTGAGAGCTGGAGGACAGAGTGGCAGTGACGGCCTCAGAAGTCCAGCAGGCAGAGAGCGAGGT
TTCAGACATTGAATCCAGGATTGCAGCCCTGAGGGCCGAGGGCTCACGGTGAAGCCCTCGGGAAAGCCCCGGAGGAAGT
CAAACCTCCCGATATTTCTCCCTCGAGTGGCTGGGAAACTTGGCAAGAGACCAGAGGACCCAAATGCAGACCCTTCAAGTG
AGGCCAAGGCAATGGCTGTGCCCTATCTTCTGAGAAGAAAGTTCAGTAATTCCTGAAAAGTCAAGGTAAAGATGATGATTC
TTTTGATCGGAAATCAGTGTACCGAGGCTCGCTGACACAGAGAAACCCCAACGCGAGGAAAGGAATGGCCAGCCACACCTT
CGCGAAACCTGTGGTGGCCACCAGTCCTAA
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### Transaction Sequence

```
MGKKLDLSKL TDEEAQHVLE VVQRDFDLRR KEEERLEALK GKIKKESKR ELLSDTAHLN ETHCARCLQP YQLLVNSKRQ
CLECGLFTCK SCGRVHPEEQ GWICDPCHLA RVVKIGSLEW YYEHVKARFK RFGSAKVIRS LHGRLQGGAG PELISEERSG
DSDQTDEDGE PGSEAQAQAQ PFGSKKKRLL SVHDFDFEGD SDDSTQPQGH SLHLSSVPEA RDSPQSLTDE SCSEKAAPHK
AEGLEEADTG ASGCHSHPEE QPTSISPSRH GALAELCPPG GSHRMALGTA AALGSNVIRN EQLPLQYLAD VDTSDDESIR
AHVMASHHSK RRGRASSESQ GLGAGVRTEA DVEEEALRRK LEELTSNVSD QETSSEEEEA KDEKAEPNRD KSVGPLPAD
PEVGTAHQ TNRQEKSPQDP GDPVQYNRTT DEELSELEDR VAVTASEVQQ AESEVSDIES RIAALRAAGL TVKPSGKPRR
KSNLPIFLPR VAGKLGKRPE DPNADPSSEA KAMAVPYLLR RKFSNSLSQ GKDDDSFDRK SVYRGSALTQR NPNARKGMAS
HTFAKPVVAH QS
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