

## Product datasheet for **SC336233**

### Melanophilin (MLPH) (NM\_001281474) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Melanophilin (MLPH) (NM_001281474) Human Untagged Clone
Tag:	Tag Free
Symbol:	MLPH
Synonyms:	SLAC2-A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC336233 representing NM_001281474. Blue=Insert sequence Red=Cloning site Green=Tag(s)

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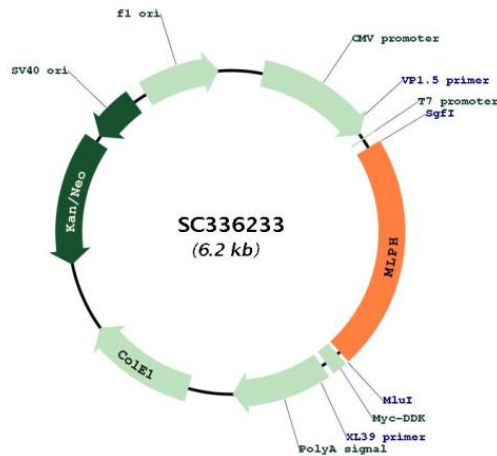
ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT  
TACAAGGATGACGACGATAAGGTTAAACGGCCGCGC



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Restriction Sites: SgfI-MluI

Plasmid Map:



ACCN: NM\_001281474

Insert Size: 1374 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_001281474.1](#)

RefSeq Size: 3508 bp

RefSeq ORF: 1374 bp

Locus ID: 79083

UniProt ID: [Q9BV36](#)

Cytogenetics: 2q37.3

MW: 50.7 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]

Transcript Variant: This variant (4) differs in the 5' UTR and lacks an alternate in-frame segment compared to variant 1. The resulting isoform (4) has the same N- and C-termini but is shorter compared to isoform 1.