

Product datasheet for **RG200895**

Melanophilin (MLPH) (NM_024101) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
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: >RG200895 representing NM_024101
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGGAAGAACTGGATCTTTCAAGCTCACTGATGAAGAGGCCAGCATGTCTTGAAGTTGTTCAAC
 GAGATTTTGACCTCCGAAGGAAAGAGGAACGGCTAGAGGCGTTGAAGGGCAAGATTAAGAAGGAAAG
 CTCCAAGAGGGAGCTGCTTTCCGACACTGCCCATCTGAACGAGACCCACTGCGCCCGCTGCCTGCAGCCC
 TACCAGCTGCTTGTGAATAGCAAAAGGCAGTGCCTGGAATGTGGCCTCTTCACTGCAAAAGCTGTGGCC
 GCGTCCACCCGGAGGAGCAGGGCTGGATCTGTGACCCCTGCCATCTGGCCAGAGTCGTGAAGATCGGCTC
 ACTGGAGTGGTACTATGAGCATGTGAAAGCCCGCTTCAAGAGGTTGGAAGTGCCAAGGTCACTCCGGTCC
 CTCCACGGGCGGCTGCAGGGTGGAGCTGGCCTGAACTGATATCTGAAGAGAGAAGTGAGACAGCGACC
 AGACAGATGAGGATGGAGAACCTGGCTCAGAGGCCAGGCCAGGCCAGCCCTTGGCAGCAAAAAA
 GCGCCTCCTCTCCGTCCACGACTTCGACTTCGAGGGAGACTCAGATGACTCCACTCAGCCTCAAGGTCAC
 TCCCTGCACCTGTCTCAGTCCCTGAGGCCAGGGACAGCCACAGTCCCTCACAGATGAGTCTGTCTCAG
 AGAAGGCAGCCCTCACAAGGCTGAGGGCTGGAGGAGGCTGATACTGGGGCTCTGGGTGCCACTCCCA
 TCCGGAAGAGCAGCCGACCAGCATCTACCTTCCAGACACGGCGCCCTGGCTGAGCTCTGCCCGCTGGA
 GGCTCCACAGGATGGCCCTGGGACTGCTGCTGCACTCGGTCGAATGTCATCAGGAATGAGCAGCTGC
 CCTGCAGTACTTGGCCGATGTGGACACCTCTGATGAGGAAAGCATCCGGGCTCACGTGATGGCCTCCCA
 CCATTCCAAGCGAGAGGCCGGGCGTCTTCTGAGAGTCAGATCTTTGAGCTGAATAAGCATATTTAGCT
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 TGCGCAGCGAGGCCGATGTAGAGGAGGAGCCCTGAGGAGGAAGCTGGAGGAGCTGACCAGCAACGTCAG
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 CAGAGTGGCAGTGACGGCTCAGAAGTCCAGCAGGCAGAGAGCGAGTTTCAGACATTGAATCCAGGATT
 GCAGCCCTGAGGGCCGACGGCTCACGGTGAAGCCCTCGGGAAGGCCCGGAGGAAGTCAAACTCCCGA
 TATTTCTCCCTCGAGTGGCTGGGAACTTGGCAAGAGACCAGAGGACCAATGCAGACCCTTCAAGTGA
 GGCCAAGGCAATGGCTGTGCCCTATCTTCTGAGAAGAAAGTTCAGTAATCCCTGAAAAGTCAAGGTAA
 GATGATGATTCTTTGATCGGAAATCAGTGTACCGAGGCTCGCTGACACAGAGAAACCCCAACGCGAGGA
 AAGGAATGGCCAGCCACACCTTCGCGAAACCTGTGGTGGCCACCATGCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

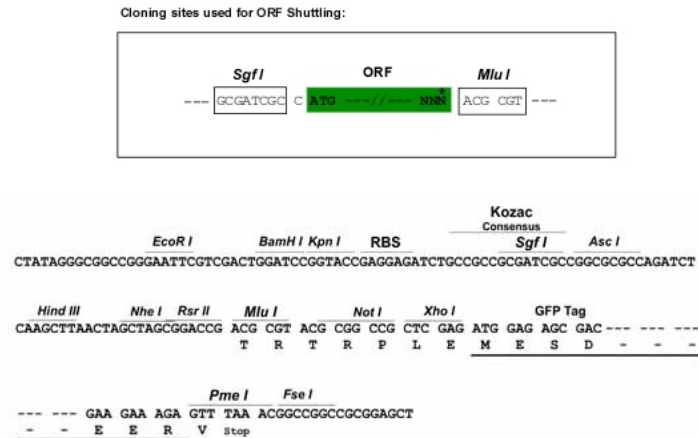
Protein Sequence: >RG200895 representing NM_024101
 Red=Cloning site Green=Tags(s)

MGKKLDL SKLTDEEAQHVLVVRDFDLRRKEERLEALKGKIKKESSKRELLSDTAHLNETHCARCLQP
 YQLLVNSKRQCLEGLFTCKSCGRVHPPEEQGWICDPCHLARVVKIGSLEWYYEHVKARFKRFGSAKVI
 LHGRLQGGAGPELISEERSGSDQTDDEGEPGSEAQAQAPFGSKKKRLLSVHDFDFEGDSDDSTQPQGH
 SLHLSVPEARDSPPQSLTDESCSEKAAPHKAEGLEEADTGASGCHSHPEEQPTSISSRHGALAECP
 GSHRMALGTAAALGSNVIRNEQLPLQYLADVDTSDDESIRAHVMASHHKKRRGRASSESQIFELNKH
 ISAVECLLTYLENTVVPPLAKGLGAGVRTEADVEEALRRKLEELTSNVSDQETSSEEEAKDEKAEPNR
 DKS VGPLPQADPEVGTAAHQTNRQEKSPQDPGDPVQYNRTTDEELSELEDRAVTAASEVQQAESVSD
 IESRI AALRAAGLTVKPSGKPRRKSNIPLPRVAGKLGKRPEDPNADPSSEAKAMAVPYLLRRKFSN
 LSKSQGK DDDSFDRKSVYRGS LTQRNP NARKMASHTFAKPVVAHQ

TRTRPLE - GFP Tag - V

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.

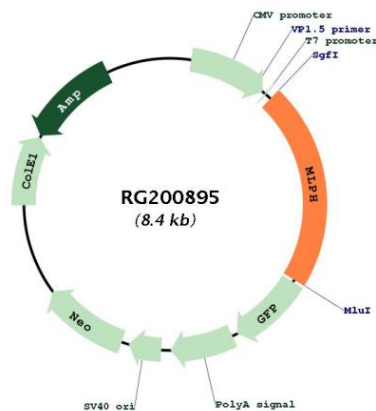
Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_024101.7](#)

RefSeq Size: 3771 bp
RefSeq ORF: 1803 bp
Locus ID: 79083
UniProt ID: [Q9BV36](#)
Cytogenetics: 2q37.3

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 RG200895