

## Product datasheet for **RC204190**

### MelanA (MLANA) (NM\_005511) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** MelanA (MLANA) (NM\_005511) Human Tagged ORF Clone  
**Tag:** Myc-DDK  
**Symbol:** MelanA  
**Synonyms:** MART-1; MART1  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-Entry (PS100001)  
**E. coli Selection:** Kanamycin (25 ug/mL)  
**ORF Nucleotide Sequence:** >RC204190 ORF sequence  
**Red=Cloning site Blue=ORF Green=Tags(s)**

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

**ATGCCAAGAGAAGATGCTCACTTCATCTATGGTTACCCAAGAAGGGGCACGGCCACTCTTACACCACGG  
CTGAAGAGGCCGCTGGGATCGGCATCCTGACAGTGATCCTGGGAGTCTTACTGCTCATCGGCTGTTGGTA  
TTGTAGAAGACGAAATGGATACAGAGCCTTGATGGATAAAAGTCTTCATGTTGGCACTCAATGTGCCTTA  
ACAAGAAGATGCCACAAGAAGGGTTTGATCATCGGGACAGCAAAGTGTCTCTTCAAGAGAAAACTGTG  
AACCTGTGGTTCCAATGCTCCACCTGCTTATGAGAACTCTCTGCAGAACAGTACCACCACCTTATTC  
ACCT**

**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA**

**Protein Sequence:** >RC204190 protein sequence  
**Red=Cloning site Green=Tags(s)**

MPREDAHFYGYPKKGHGSYTTAEEAAGIGILTVILGVLLLIGCWYCRRRNGYRALMDKSLHVGTQCAL  
TRRCPQEGFDHRDSKVSLEKNCPEVVPNAPPAYEKLSAEQSPPPYSP

**TRTRPLEQKLISEEDLAANDILDYKDDDDKV**

**Chromatograms:** [https://cdn.origene.com/chromatograms/mk6059\\_h05.zip](https://cdn.origene.com/chromatograms/mk6059_h05.zip)

**Restriction Sites:** Sgfl-Mlul



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**Cloning Scheme:**


**ACCN:** NM\_005511

**ORF Size:** 354 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\\_005511.2](#)

**RefSeq Size:** 1524 bp

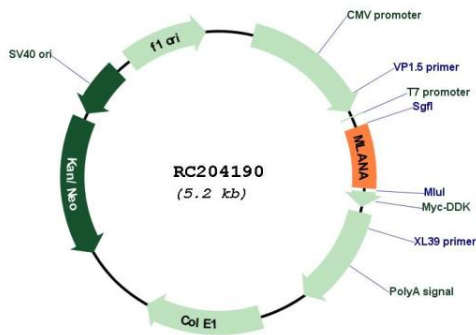
**RefSeq ORF:** 357 bp

**Locus ID:** 2315  
**UniProt ID:** [Q16655](#)  
**Cytogenetics:** 9p24.1

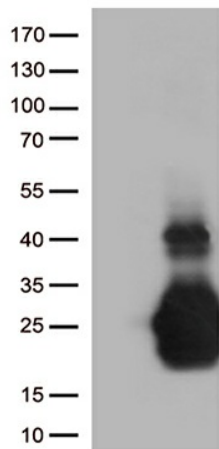
**Protein Families:** Transmembrane  
**MW:** 13.2 kDa

**Gene Summary:** Involved in melanosome biogenesis by ensuring the stability of GPR143. Plays a vital role in the expression, stability, trafficking, and processing of melanocyte protein PMEL, which is critical to the formation of stage II melanosomes.[UniProtKB/Swiss-Prot Function]

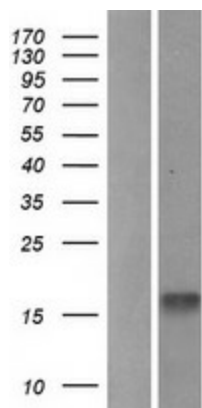
### Product images:



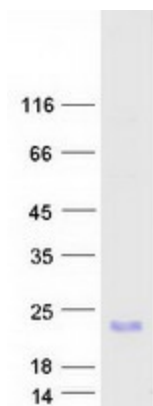
Circular map for RC204190



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MLANA (Cat# RC204190, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MLANA (Cat# [TA506018])(1:500)



Western blot validation of overexpression lysate (Cat# [LY417261]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204190 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MLANA protein (Cat# [TP304190]). The protein was produced from HEK293T cells transfected with MLANA cDNA clone (Cat# RC204190) using MegaTran 2.0 (Cat# [TT210002]).