

Product datasheet for **RC234681**

Melanoma gp100 (PMEL) (NM_001200054) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Melanoma gp100 (PMEL) (NM_001200054) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Melanoma gp100
Synonyms:	D12S53E; gp100; ME20; ME20-M; ME20M; P1; P100; PMEL17; SI; SIL; SILV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC234681 representing NM_001200054
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGATCTGGTGCTAAAAAGATGCCTTCTTCATTTGGCTGTGATAGGTGCTTTGCTGGCTGTGGGGCTA
 CAAAAGTACCCAGAAACCAGACTGGCTTGGTGTCTCAAGGCAACTCAGAACCAAAGCCTGGAACAGGCA
 GCTGTATCCAGAGTGACAGAAGCCAGAGACTTGACTGCTGGAGAGGTGGTCAAGTGTCCCTCAAGGTC
 AGTAATGATGGGCCTACACTGATTGGTGCAATGCCTCCTTCTCTATTGCCTTGAACCTCCCTGGAAGCC
 AAAAGGATTGCCAGATGGGCAGGTTATCTGGGTCAACAATACCATCATCAATGGGAGCCAGGTGTGGG
 AGGACAGCCAGTGTATCCCCAGGAACTGACGATGCCTGCATCTCCCTGATGGTGGACCTTGCCCATCT
 GGCTCTTGGTCTCAGAAGAGAAGCTTTGTTTATGTCTGGAAGACCTGGGGCAATACTGGCAAGTCTAG
 GGGGCCAGTGTCTGGCTGAGCATTGGGACAGGCAGGGCAATGCTGGGCACACACCATGGAAGTGAC
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 GACCAGGTGCCTTCTCCGTGAGCGTGTCCAGTTGCGGGCCTGGATGGAGGGAACAAGCACTTCTCGA
 GAAATCAGCCTCTGACCTTTGCCCTCCAGCTCCATGACCCAGTGGCTATCTGGCTGAAGCTGACCTCTC
 CTACACCTGGGACTTTGGAGACAGTAGTGAACCTGATCTCTCGGGCACTTGTGGTCACTCATACTTAC
 CTGGAGCTGGCCAGTCACTGCCAGGTGGTCTGCAGGCTGCCATTCTCTCACCTCCTGTGGCTCCT
 CCCAGTTCAGGCACCACAGATGGGCACAGGCCAACTGCAGAGGCCCTAACACCACAGCTGGCCAAGT
 GCCTACTACAGAAGTTGTGGTACTACCTGGTCAGGCGCAACTGCAGAGCCCTCTGGAACCACATCT
 GTGCAGGTGCCAACCACTGAAGTCATAAGCACTGCACCTGTGCAGATGCCAACTGCAGAGACACAGGTA
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 ACAGAGTGGTGGAGACCACAGCTAGAGAGCTACCTATCCCTGAGCCTGAAGGTCCAGATGCCAGCTCAA
 TCATGTCTACGAAAGTATTACAGGTTCCCTGGGCCCCCTGCTGGATGGTACAGCCACCTTAAGGCTGGT
 GAAGAGACAAGTCCCCCTGGATTGTGTTCTGTATCGATATGGTTCCTTTCCGTACCCTGGACATTGTC
 CAGGGTATTGAAAGTGCCGAGATCCTGCAGGCTGTCCGTCCGGTGGGGGGATGCATTTGAGCTGACTG
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 GGCTCGGGGACATACTGCCTCAATGTGTCTCTGGCTGATACCAACAGCCTGGCAGTGGTGCAGCCAGC
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 GGGCATCTTGGTGGTGTGATGGCTGTGGTCTTGCATCTCTGATATATAGGCGCAGACTTATGAAGCAA
 GACTTCTCCGTACCCAGTTGCCACATAGCAGCAGTCACTGGCTGCGTCTACCCGCATCTTCTGTCTT
 GTCCATTGGTGAGAACAGCCCCCTCCTCAGTGGGCAGCAGGTC

ACGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC234681 representing NM_001200054
 Red=Cloning site Green=Tags(s)

MDLVLKRCLLHLAVIGALLAVGATKVPNRQDWLGVSRLRTKAWNRLYPEWTEAQRLCDWRGGQVSLKV
 SNDGPTLIGANASFSIALNFPGSQKVLDPGQVIWVNNIINGSQVWGGQPVYPQETDDACIFPDGGPCPS
 GWSQKRSFVYVWKTWQYVWQVLGGPVSGLSIGTGRAMLGHTMEVTYHRRGSRSYVPLAHSSSAFTIT
 DQVPFVSVSQRALDGGNKHFLRNQPLTFALQLHDPSTYLAADLSYTWDFGDSSTLISRALVVTHTY
 LEPGPVTAQVVLQAAIPLTSCGSSPVPGTTDGHRPTAEAPNTTAGQVPTTEVVGTPGQAPTAEPSTTS
 VQVPTTEVISTAPVQMPTAESTGMTPEKVPVSEVMGTTLAEMSTPEATGMTPAEVSIVVLSGTTAAQVTT
 TEWVETARELPIPEPEGPDASSIMSTESITGSLGPLLDGTATLRLVKRQVPLDCVLYRYGSFVTLTDIV
 QGIESAEILQAVPSGEGDAFELTVSCQGLPKEACMEISSPGCQPPAQRQCQVPLPSPACQLVLHQILKG
 GSGTYCLNVSLADTNSLAVVSTQLIMPVPGILLTGQEAGLQVPLIVGILLVLMVVLASLIYRRRLMKQ
 DFSVPQLPHSSSHWLRPRIFCSCPIGENSPLLSGQQV

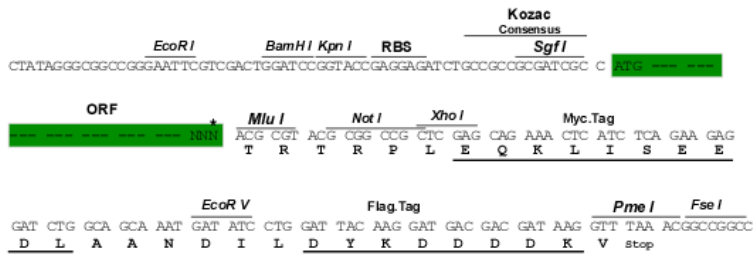
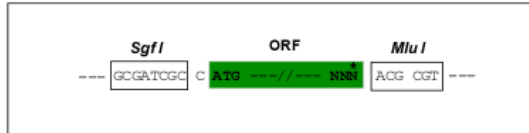
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja3369_e02.zip

Restriction Sites: Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_001200054

ORF Size: 2004 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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.

RefSeq: [NM_001200054.1](#), [NP_001186983.1](#)

RefSeq Size: 2181 bp

RefSeq ORF: 2007 bp

Locus ID: 6490

UniProt ID: [P40967](#)

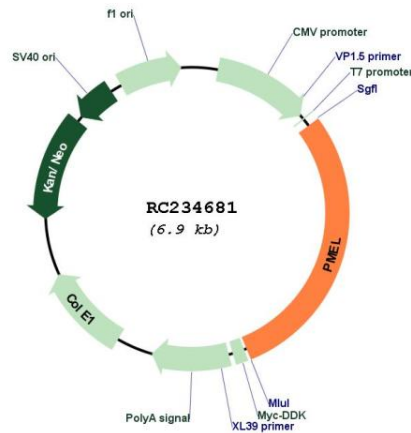
Cytogenetics: 12q13.2

Protein Families: Secreted Protein, Transmembrane

MW: 70.9 kDa

Gene Summary:

This gene encodes a melanocyte-specific type I transmembrane glycoprotein. The encoded protein is enriched in melanosomes, which are the melanin-producing organelles in melanocytes, and plays an essential role in the structural organization of premelanosomes. This protein is involved in generating internal matrix fibers that define the transition from Stage I to Stage II melanosomes. This protein undergoes a complex pattern of posttranslational processing and modification that is essential to the proper functioning of the protein. A secreted form of this protein that is released by proteolytic ectodomain shedding may be used as a melanoma-specific serum marker. Alternate splicing results in multiple transcript variants. [provided by RefSeq, Jan 2011]

Product images:


Circular map for RC234681