

Product datasheet for **RG234469**

Melanoma gp100 (PMEL) (NM_001200053) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Melanoma gp100 (PMEL) (NM_001200053) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Melanoma gp100
Synonyms:	D12S53E; gp100; ME20; ME20-M; ME20M; P1; P100; PMEL17; SI; SIL; SILV
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RG234469 representing NM_001200053
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGATCTGGTGCTAAAAAGATGCCTTCTTCATTGGCTGTGATAGGTGCTTTGCTGGCTGTGGGGCTA
 CAAAAGGGAGCCAGGTGTGGGGAGGACAGCCAGTGTATCCCCAGGAACTGACGATGCCTGCATCTTCCC
 TGATGGTGGACCTTGCCCATCTGGCTCTTGGTCTCAGAAGAGAAGCTTTGTTATGTCTGGAAGACCTGG
 GGCCAATACTGGCAAGTTCTAGGGGGCCAGTGTCTGGGCTGAGCATTGGGACAGGCAGGCAATGCTGG
 GCACACACACCATGGAAGTGACTGTCTACCATCGCCGGGATCCCGAGCTATGTGCCTCTTGCTCATTC
 CAGCTCAGCCTTACCATTACTGACCAGGTGCCTTCTCCGTGAGCGTGTCCAGTTGCGGGCCTTGGAT
 GGAGGGAACAAGCACTTCTGAGAAATCAGCCTCTGACCTTGGCCTCCAGCTCCATGACCCAGTGGCT
 ATCTGGCTGAAGCTGACCTCTCTACACCTGGGACTTTGGAGACAGTAGTGAACCTGATCTCTCGGGC
 ACTTGTGGTCACTCATACTTACCTGGAGCTGGCCAGTCACTGCCAGGTGGTCTGCAGGCTGCCATT
 CCTCTCACCTCCTGTGGCTCCTCCCAAGTTCAGGCACACAGATGGGCACAGGCCAACTGCAGAGGCC
 CTAACACCACAGCTGGCCAAGTGCTACTACAGAAGTTGTGGTACTACACCTGGTCAGGCGCCAAGTGC
 AGAGCCCTCTGGAACCACATCTGTGCAGGTGCCAACCCTGAAGTCATAAGCACTGCACCTGTGCAGATG
 CCAACTGCAGAGAGCACAGGTATGACACCTGAGAAGGTGCCAGTTTCAGAGGTATGGGTACCACACTGG
 CAGAGATGTCACTCCAGAGGCTACAGGTATGACACCTGCAGAGGTATCAATTGTGGTGTCTTCTGGAAC
 CACAGCTGCACAGGTAACTACAGAGTGGGTGGAGACCACAGCTAGAGAGCTACCTATCCCTGAGCCT
 GAAGGTCCAGATGCCAGCTCAATCATGTCTACGAAAGTATTACAGGTTCCTGGGCCCTGCTGGATG
 GTACAGCCACCTTAAGGCTGGTGAAGAGACAAGTCCCCCTGGATTGTGTTCTGTATCGATATGGTTCCTT
 TTCCGTACCCTGGACATTGTCCAGGTTATTGAAGTGCCGAGATCCTGCAGGCTGTGCCGTCCGGTGAG
 GGGGATGCATTTGAGCTGACTGTCTGCTGCAAGCGGGCTGCCAAGGAAGCCTGCATGGAGATCTCAT
 CGCCAGGGTGCCAGCCCCTGCCAGCGCTGTGCCAGCCTGTGCTACCCAGCCAGCCTGCCAGTGGT
 TCTGCACCAGATACTGAAGGGTGGCTCGGGGACATACTGCCTCAATGTGTCTCTGGCTGATACCAACAGC
 CTGGCAGTGGTCAGCACCCAGCTTATCATGCCTGGTCAAGAAGCAGGCCTTGGCAGGTTCCGCTGATCG
 TGGGCATCTTGTGGTGTGATGGCTGTGGTCTTGCATCTCTGATATATAGGCGCAGACTATGAAGCA
 AGACTTCTCCGTACCCAGTTGCCACATAGCAGCAGTCACTGGCTGCGTCTACCCCGCATCTTCTGCTCT
 TGTCCTTGGTGAGAACAGCCCCCTCCTCAGTGGGCAGCAGTCT

ACGCGTACGCGGCGGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG234469 representing NM_001200053
 Red=Cloning site Green=Tags(s)

MDLVLRCLLHLAVIGALLAVGATKGSQVWGGQPVPYQETDDACIFPDGGPCPSGSWSQKRSEFVYVWKTW
 GQYWQVLGGPVSGLSIGTGRAMLGTHMEVTVYHRRGSRSYVPLAHSSSAFTITDQVPFVSVSQRLRALD
 GGNKHFLRNQPLTFALQLHDPSTGYLAEDLSYTWDFGDSGTLISRALVVHTHTYLEPGPVTAQVVLQAAI
 PLTSCGSSPVPPTDGHRTAEAPNTTAGQVPTTEVVGTTPGQAPTAEPSTTSVQVPTTEVISTAPVQM
 PTAESTGMTPEKVPVSEVMGTTLAEMSTPEATGMTPAEVSIVVLSGTTAAQVTTTEWVETTARELPIPEP
 EGPDAASSIMSTESITGSLGPLLDGTATLRLVKRQVPLDCVLYRYGSFSVTLDIVQIESAEILQAVPSGE
 GDAFELTVSCQGGPKPEACMEISSPGCQPPAQRLCQVLPSPACQLVLHQILKGGSGTYCLNVSLADTNS
 LAVVSTQLIMPGQEAGLQVPLIVGILLVMAVVLASLIYRRRLMKQDFSVPQLPHSSSHWLRLPRIFCS
 CPIGENSPLLSGQQV

TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001200053

ORF Size: 1725 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.

RefSeq: [NM_001200053.1](#), [NP_001186982.1](#)

RefSeq Size: 1902 bp

RefSeq ORF: 1728 bp

Locus ID: 6490

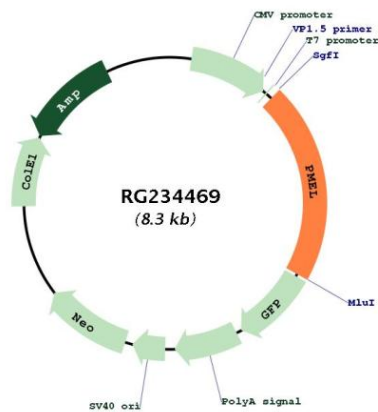
UniProt ID: [P40967](#)

Cytogenetics: 12q13.2

Protein Families: Secreted Protein, Transmembrane

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 RG234469