OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RG230133

MITF (NM_001184967) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MITF (NM_001184967) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MITF
Synonyms:	bHLHe32; CMM8; COMMAD; MI; WS2; WS2A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

ORF Nucleotide Sequence:

>RG230133 representing NM_001184967
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGACATCACGCATCTTGCTACGCCAGCAACTCATGCGTGAGCAGATGCAGGAGCAGGAGCGCAGGGAGC
AGCAGCAGAAGCTGCAGGCGGCCCAGTTCATGCAACAGAGAGTGCCCGTGAGTCAGACACCAGCCATAAA
CGTCAGTGTGCCCACCACCCTTCCCTCTGCCACGCAGGTGCCGATGGAAGTCCTTAAGGTGCAGACCCAC
CTCGAAAACCCCACCAAGTACCACATACAGCAAGCCCAACGGCAGCAGGTAAAGCAGTACCTTTCTACCA
CTTTAGCAAATAAACATGCCAACCAAGTCCTGAGCTTGCCATGTCCAAACCAGCCTGGCGATCATGTCAT
GCCACCGGTGCCGGGGAGCAGCGCACCCAACAGCCCCATGGCTATGCTTACGCTTAACTCCAACTGTGAA
AAAGAGGGATTTTATAAGTTTGAAGAGCAAAACAGGGCAGAGAGCGAGTGCCCAGGCATGAACACACATT
CACGAGCGTCCTGTATGCAGATGGATGATGTAATCGATGACATCATTAGCCTAGAATCAAGTTATAATGA
GGAAATCTTGGGCTTGATGGATCCTGCTTTGCAAATGGCAAATACGTTGCCTGTCTCGGGAAACTTGATT
GATCTTTATGGAAACCAAGGTCTGCCCCCACCAGGCCTCACCATCAGCAACTCCTGTCCAGCCAACCTTC
CCAACATAAAAAGGGAGCTCACAGAGTCTGAAGCAAGAGCACTGGCCAAAGAGAGGCAGAAAAAGGACAA
TCACAACCTGATTGAACGAAGAAGAAGATTTAACATAAATGACCGCATTAAAGAACTAGGTACTTTGATT
CCCAAGTCAAATGATCCAGACATGCGCTGGAACAAGGGAACCATCTTAAAAGCATCCGTGGACTATATCC
GAAAGTTGCAACGAGAACAGCAACGCGCAAAAGAACTTGAAAACCGACAGAAGAAACTGGAGCACGCCAA
CCGGCATTTGTTGCTCAGAATACAGGAACTTGAAATGCAGGCTCGAGCTCATGGACTTTCCCTTATTCCA
TCCACGGGTCTCTGCTCTCCAGATTTGGTGAATCGGATCATCAAGCAAGAACCCGTTCTTGAGAACTGCA
GCCAAGACCTCCTTCAGCATCATGCAGACCTAACCTGTACAACAACTCTCGATCTCACGGATGGCACCAT
CACCTTCAACAACAACCTCGGAACTGGGACTGAGGCCAACCAAGCCTATAGTGTCCCCACAAAAATGGGA
TCCAAACTGGAAGACATCCTGATGGACGACACCCTTTCTCCCGTCGGTGTCACTGATCCACTCCTTTCCT
CAGTGTCCCCCGGAGCTTCCAAAACAAGCAGCCGGAGGAGCAGTATGAGCATGGAAGAGACGGAGCACAC
TTGT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

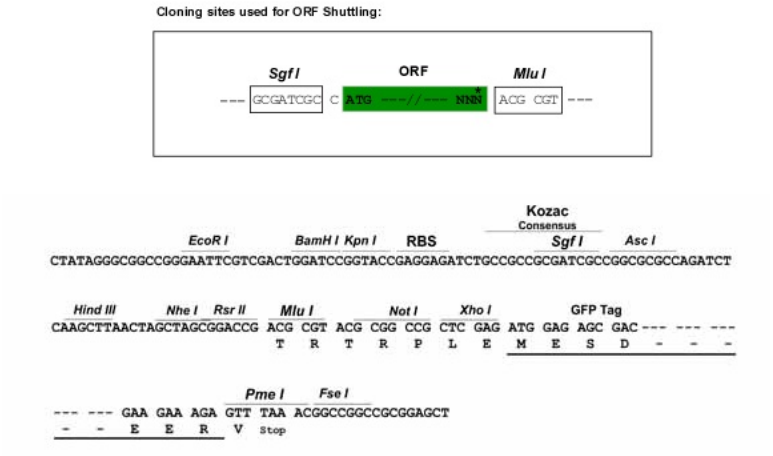
>RG230133 representing NM_001184967
Red=Cloning site Green=Tags(s)

MTSRILLRQQLMREQMQEQERREQQQKLQAAQFMQQRVPVSQTPAINVSVPTTLPSATQVPMEVLKVQTH
LENPTKYHIQQAQRQQVKQYLSTTLANKHANQVLSLPCPNQPGDHVMPPVPGSSAPNSPMAMLTLNSNCE
KEGFYKFEEQNRAESECPGMNTHSRASCMQMDDVIDDIISLESSYNEEILGLMDPALQMANTLPVSGNLI
DLYGNQGLPPPGLTISNSCPANLPNIKRELTESEARALAKERQKKDNHNLIERRRRFNINDRIKELGTLI
PKSNDPDMRWNKGTILKASVDYIRKLQREQQRAKELENRQKKLEHANRHLLLRIQELEMQARAHGLSLIP
STGLCSPDLVNRIIKQEPVLENCSQDLLQHHADLTCTTTLDLTDGTITFNNNLGTGTEANQAYSVPTKMG
SKLEDILMDDTLSPVGVTDPLLSSVSPGASKTSSRRSSMSMEETEHTC

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

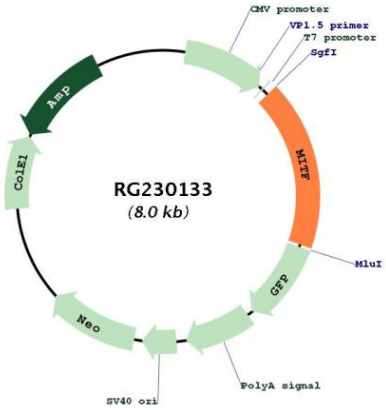
Cloning Scheme:



ACCN:	NM_001184967
ORF Size:	1404 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_001184967.2
RefSeq Size:	4685 bp
RefSeq ORF:	1407 bp
Locus ID:	4286
UniProt ID:	O75030

Cytogenetics:	3p13
Protein Families:	Druggable Genome, Transcription Factors
Protein Pathways:	Melanogenesis, Melanoma, Pathways in cancer
Gene Summary:	The protein encoded by this gene is a transcription factor that contains both basic helix-loop-helix and leucine zipper structural features. The encoded protein regulates melanocyte development and is responsible for pigment cell-specific transcription of the melanogenesis enzyme genes. Heterozygous mutations in the this gene cause auditory-pigmentary syndromes, such as Waardenburg syndrome type 2 and Tietz syndrome. [provided by RefSeq, Aug 2017]

Product images:



Circular map for RG230133