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 SC317086

MITF (NM_000248) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MITF (NM_000248) Human Untagged Clone
Tag:	Tag Free
Symbol:	MITF
Synonyms:	bHLHe32; CMM8; COMMAD; MI; WS2; WS2A
Mammalian Cell Selection:	None
Vector:	pCMV6-XL5
E. coli Selection:	Ampicillin (100 ug/mL)

View online »

Fully Sequenced ORF:

```
>OriGene sequence for NM_000248 edited
GGGAGGGATAGTCTACCGTCTCTCACTGGATTGGTGCCACCTAAAACATTGTTATGCTGG
AAATGCTAGAATATAATCACTATCAGGTGCAGACCCACCTCGAAAACCCCACCAAGTACC
ACATACAGCAAGCCCAACGGCAGCAGGTAAAGCAGTACCTTTCTACCACTTTAGCAAATA
AACATGCCAACCAAGTCCTGAGCTTGCCATGTCCAAACCAGCCTGGCGATCATGTCATGC
CACCGGTGCCGGGGAGCAGCGCACCCAACAGCCCCATGGCTATGCTTACGCTTAACTCCA
ACTGTGAAAAAGAGGGATTTTATAAGTTTGAAGAGCAAAACAGGGCAGAGAGCGAGTGCC
CAGGCATGAACACACATTCACGAGCGTCCTGTATGCAGATGGATGATGTAATCGATGACA
TCATTAGCCTAGAATCAAGTTATAATGAGGAAATCTTGGGCTTGATGGATCCTGCTTTGC
AAATGGCAAATACGTTGCCTGTCTCGGGAAACTTGATTGATCTTTATGGAAACCAAGGTC
TGCCCCCACCAGGCCTCACCATCAGCAACTCCTGTCCAGCCAACCTTCCCAACATAAAAA
GGGAGCTCACAGCGTGTATTTTTCCCACAGAGTCTGAAGCAAGAGCACTGGCCAAAGAGA
GGCAGAAAAAGGACAATCACAACCTGATTGAACGAAGAAGAAGATTTAACATAAATGACC
GCATTAAAGAACTAGGTACTTTGATTCCCAAGTCAAATGATCCAGACATGCGCTGGAACA
AGGGAACCATCTTAAAAGCATCCGTGGACTATATCCGAAAGTTGCAACGAGAACAGCAAC
GCGCAAAAGAACTTGAAAACCGACAGAAGAAACTGGAGCACGCCAACCGGCATTTGTTGC
TCAGAATACAGGAACTTGAAATGCAGGCTCGAGCTCATGGACTTTCCCTTATTCCATCCA
CGGGTCTCTGCTCTCCAGATTTGGTGAATCGGATCATCAAGCAAGAACCCGTTCTTGAGA
ACTGCAGCCAAGACCTCCTTCAGCATCATGCAGACCTAACCTGTACAACAACTCTCGATC
TCACGGATGGCACCATCACCTTCAACAACAACCTCGGAACTGGGACTGAGGCCAACCAAG
CCTATAGTGTCCCCACAAAAATGGGATCCAAACTGGAAGACATCCTGATGGACGACACCC
TTTCTCCCGTCGGTGTCACTGATCCACTCCTTTCCTCAGTGTCCCCCGGAGCTTCCAAAA
CAAGCAGCCGGAGGAGCAGTATGAGCATGGAAGAGACGGAGCACACTTGTTAGCGAATCC
TCCCTGCACTGCATTCGCACAAACTGCTTCCTTTCTTGATTCGTAGATTTAATAACTTAC
CTGAAGGGGTTTTCTTGATAATTTTCCTTTAATATGAAATTTTTTTTCATGCTTTATCAA
TAGCCCAGGATATATTTTATTTTTAGAATTTTGTGAAACAGACTTGTATATTCTATTTTA
CAACTACAAATGCCTCCAAAGTATTGTACAAATAAGTGTGCAGTATCTGTGAACTGAATT
CACCACAGACTTTAGCTTTCTGAGCAAGAGGATTTTGCGTCAGAGAAATGTCTGTCCATT
TTTATTCAGGGGAAACTTGATTTGAGATTTTTATGCCTGTGACTTCCTTGGAAATCAAAT
GTAAAGTTTAATTGAAAGAATGTAAAGCAACCAAAAAGAAAAAAAAAAAA
```

Restriction Sites: Please inquire

ACCN: NM_000248

Insert Size: 1700 bp

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

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_000248.2, NP_000239.1
RefSeq Size:	4490 bp
RefSeq ORF:	1260 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] Transcript Variant: This variant (4) differs in the 5' UTR, the 5' coding region and uses an alternate, in-frame splice site in the 3' coding region, compared to variant 1. The resulting isoform (4), also known as isoform MITF-M, has a distinct N-terminus and is shorter than isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.