

## Product datasheet for **SC307637**

### MITF (NM\_198158) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	MITF (NM_198158) Human Untagged Clone
Tag:	Tag Free
Symbol:	MITF
Synonyms:	bHLHe32; CMM8; COMMAD; MI; WS2; WS2A
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL5</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

**Fully Sequenced ORF:** >OriGene sequence for NM\_000248 edited  
 GGGAGGGATAGTCTACCGTCTCTCACTGGATTGGTGCCACCTAAAAACATTGTTATGCTGG  
 AAATGCTAGAATAAATCACTATCAGGTGCAGACCCACCTCGAAAACCCCAAGTACC  
 ACATACAGCAAGCCCAACGGCAGCAGGTAAGCAGTACCTTTCTACCACTTTAGCAAATA  
 AACATGCCAACCAAGTCTGAGCTTGCCATGTCCAAACCAGCCTGGCGATCATGTCATGC  
 CACCGGTGCCGGGAGCAGCGCACCCAAACAGCCCATGGCTATGCTTACGCTTAACTCCA  
 ACTGTGAAAAAGAGGGATTTTATAAGTTTGAAGAGCAAAAACAGGGCAGAGAGCGAGTGCC  
 CAGGCATGAACACACATTACAGCGTCCTGTATGCAGATGGATGATGTAATCGATGACA  
 TCATTAGCCTAGAATCAAGTTATAATGAGGAAATCTTGGGCTTGATGGATCCTGCTTTGC  
 AAATGGCAAATACGTTGCTGTCTCGGAAACTTGATTGATCTTTATGGAACCAAGGTC  
 TGCCCCACCAGGCTCACCATCAGCAACTCCTGTCCAGCCAACCTTCCCAACATAAAAA  
 GGGAGCTCACAGAGTCTGAAGCAAGAGCACTGGCCAAAGAGAGGCAGAAAAAGGACAATC  
 ACAACCTGATTGAACGAAGAAGAAGATTTAACATAAATGACCGCATTAAAGAACTAGGTA  
 CTTTGATTCCCAAGTCAAATGATCCAGACATGCGCTGGAACAAGGGAACCATCTTAAAG  
 CATCCGTGGACTATATCCGAAAGTTGCAACGAGAACAGCAACCGCGAAAAGAACTTGAAA  
 ACCGACAGAAGAACTGGAGCACGCCAACCGGCATTTGTTGCTCAGAATACAGGAACTTG  
 AAATGCAGGCTCGAGCTCATGGACTTTCCTTATTCCATCCACGGGTCTCTGCTCTCCAG  
 ATTTGGTGAATCGGATCATCAAGCAAGAACCCTTCTTGAGAACTGCAGCCAAGACCTCC  
 TTCAGCATCATGCAGACCTAACCTGTACAACAACTCTCGATCTCACGGATGGCACCATCA  
 CCTTCAACAACAACCTCGGAACTGGGACTGAGGCCAACCAAGCCTATAGTGTCCCAACA  
 AAATGGGATCCAACTGGAAGACATCCTGATGGACGACACCCTTCTCCCGTCGGTGTC  
 CTGATCCACTCCTTCTCAGTGTCCCCGGAGCTTCCAAAACAAGCAGCCGGAGGAGCA  
 GTATGAGCATGGAAGAGACGGAGCACACTTGTAGCGAATCCTCCCTGCATGCATTCGC  
 ACAAACTGCTTCTTCTTGATTTCGTAGATTTAATAACTTACCTGAAGGGTTTTCTTGA  
 TAATTTTCTTTAATATGAAATTTTTTTCATGCTTTATCAATAGCCAGGATATATTTT  
 ATTTTTAGAATTTTGTGAAACAGACTTGTATATTCTATTTTACAACATAAATGCCTCCA  
 AAGTATTGTACAATAAGTGTGCAGTATCTGTGAACTGAATTCACCACAGACTTTAGCTT  
 TCTGAGCAAGAGGATTTTGCCTCAGAGAAATGTCTGTCCATTTTTATTACAGGGAAACTT  
 GATTTGAGATTTTATGCCTGTGACTTCTTGGAAATCAAATGTAAGTTTAATTGAAAG  
 AATGTAAGCAACCAAAAAGAAAAAAAAAAAAAAAAA

**5' Read Nucleotide Sequence:** >OriGene 5' read for NM\_198158 unedited  
 AACGTCAAAAATTTGTATACGACTCACTATAGGGCGGCCGGAATCAAATCTGGTACCGG  
 TCCGGAATTCGGGATATCGTGCAGCCACGCGTCCGCCACGCGTCCGGGGAGGGATAG  
 TCTACCGTCTCTCACTGGATTGGTGCCACCTAAAAACATTGTTATGCTGGAATGCTAGAA  
 TATAATCACTATCAGGTGCAGACCCACCTCGAAAACCCCAAGTACCACATACAGCAA  
 GCCAACGGCAGCAGGTAAGCAGTACCTTTCTACCACTTTAGCAAATAAATGCAAC  
 CAAGTCTGAGCTTGCCATGTCCAAACCAGCCTGGCGATCATGTATGCCACCGGTGCCG  
 GGGAGCAGCGCACCAACAGCCCATGGCTATGCTTACGCTTAACTCCAACGTGAAAAA  
 GAGGGATTTTATAAGTTTGAAGAGCAAAAACAGGGCAGAGAGCGAGTGCCAGGCATGAAC  
 ACACATTCACGAGCGTCTGTATGCAGATGGATGATGTAATCGATGACATCATTAGCCTA  
 GAATCAAGTTATAATGAGGAAATCTTGGGCTTGATGGATCCTGCTTTGCAATGGCAAT  
 ACGTTGCCTGTCTCGGAAACTTGATTGATCTTTATGGAACCAAGGTCTGCCCCACCA  
 GGCTCACCATCAGCAACTCCTGTCCAGCCAACCTTCCCAACATAAAAAGGGAGCTCACA  
 GAGTCTGAAGCAAGAGCACTGGCCAAAGAGAGGCAGAAAAAGGACAATCACAACCTGATT  
 GAACGAAGAAGAAGATTTACCATAATGACCGCATTAAAGACTANGTACTTTGATTCCCAA  
 GTCAAATGATCCAGAAGTGCCTGGGACAAAGGAACCATCTTAAAGCATCCGTGGACTA  
 TATCCCAAAGTTGCAA

**Restriction Sites:** Please inquire  
**ACCN:** NM\_198158

<b>Insert Size:</b>	1727 bp
<b>OTI Disclaimer:</b>	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).
<b>OTI Annotation:</b>	The ORF of this clone matches RefSeq sequence, NM_000248.2, perfectly except for an 18bp deletion.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u><a href="#">NM_198158.1</a></u> , <u><a href="#">NP_937801.1</a></u>
<b>RefSeq Size:</b>	4472 bp
<b>RefSeq ORF:</b>	1242 bp
<b>Locus ID:</b>	4286
<b>UniProt ID:</b>	<u><a href="#">O75030</a></u>
<b>Cytogenetics:</b>	3p13
<b>Protein Families:</b>	Druggable Genome, Transcription Factors
<b>Protein Pathways:</b>	Melanogenesis, Melanoma, Pathways in cancer
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (5) differs in the 5' UTR and the 5' coding region, compared to variant 1. The resulting isoform (5), has a distinct N-terminus and is shorter than isoform 1.</p> <p>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.</p>