

Product datasheet for **SC328158**

MITF (NM_001184968) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MITF (NM_001184968) Human Untagged Clone
Tag:	Tag Free
Symbol:	MITF
Synonyms:	bHLHe32; CMM8; COMMAD; MI; WS2; WS2A
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001184968, the custom clone sequence may differ by one or more nucleotides

```
ATGCTGGAAATGCTAGAATATAATCACTATCAGGTGCAGACCCACCTCGAAAACCCACCAAGTACCACA  
TACAGCAAGCCCAACGGCAGCAGGTAAGCAGTACCTTTCTACCACTTTAGCAAATAAACATGCCAACCA  
AGTCCTGAGCTTGCCATGTCCAACCAGCCTGGCGATCATGTCATGCCACCGGTGCCGGGGAGCAGCGCA  
CCCAACAGCCCCATGGCTATGCTTACGCTTAACCTCAACTGTGAAAAAGAGTTTATGAAGCAGTGA
```

Restriction Sites:	Please inquire
ACCN:	NM_001184968
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_001184968.1](#), [NP_001171897.1](#)

RefSeq Size: 1108 bp

RefSeq ORF: 276 bp

Locus ID: 4286

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 (8) has multiple differences, compared to variant 1. These differences result in a distinct 5' UTR and cause translation initiation at an alternate start codon, compared to variant 1. The encoded protein (isoform 8) is shorter than isoform 1 and has unique N- and C-termini.