

## Product datasheet for **MC217141**

### Mitf (NM\_001178049) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Mitf (NM_001178049) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Mitf
Synonyms:	BCC2; Bhlhe32; bw; Gsfbcc2; mi; vit; Vitiligo; Wh
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**Fully Sequenced ORF:** >NM\_001178049.1  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAGGCGCTTAGATTTGAGATGCTCATCCCCTGCTCCTTTGAAAGCTTGTGTCTCAGTCTGCAGAGC  
 ATTCTGGGGCCTCCAAGCCTCCGTTAAGCTCCTCCACTATGACATCACGCATCTTGCTACGCCAGCAACT  
 CATGCGTGAGCAGATGCAGGAGCAGGAGCGCAGGGAGCAGCAGCAGAAGCTGCAGGCAGCCAGTTCATG  
 CAACAGAGAGTGGCCGTGAGTCAGACACCAGCCATAAACGTCAGCGTGCCACCACCCTTCCCTCTGCCA  
 CCCAGGTGCCGATGGAAGTCCTAAGGTGCAGACCCACCTGGAAAACCCACCAAGTACCACATACAGCA  
 AGCTCAGAGGCACCAGGTAAGCAGTACCTTTCTACCCTTTAGCAAATAAACATGCCAGCCAAGTCTGT  
 AGCTCACCATGTCAAACCAGCCTGGCGACCATGCCATGCCACCAGTGCCGGGGAGCAGCGCACCCAACA  
 GCCCTATGGCTATGCTCACTCTTAACCTCAACTGTAAAAAGAGGCATTTTATAAGTTTGAGGAGCAGAG  
 CAGGGCAGAGAGTGAAGTCCCAGGTATGAACACGCACTCTCGAGCGTCGTGCATGCAGATGGATGATGA  
 ATTGATGACATCATCAGCCTGGAATCAAGTTATAATGAAGAAATTTGGGCTTGATGGATCCGGCCTTGC  
 AAATGGCAAATACGTTACCCGTCTCTGGAACTTGATCGACCTCTACAGCAACCAGGGCCTGCCACCGCC  
 AGGCCTTACCATCAGCAACTCCTGTCCAGCCAACCTTCCCAACATAAAAAAGGGAGCTCACAGCGTGTATT  
 TTCCCCACAGAGTCTGAAGCAAGAGCATTGGCTAAAGAGAGGCAGAAAAAGGACAATCACAACTTGATTG  
 AACGAAGAAGAAGATTTAACATAAACGACCCGATTAAGGAGCTAGGTACTCTGATCCCCAAGTCAAATGA  
 TCCAGACATGCGGTGGAACAAGGGAACCATCTCAAGGCCTCTGTGGACTACATCCGGAAGTTGCAACGG  
 GAACAGCAACGAGCTAAGGACCTTGAAAACCGACAGAAGAAGCTGGAGCATGCGAACCGGCACCTGCTGC  
 TCAGAGTACAGGAGCTGGAGATGCAGGCTAGAGCGCATGGACTTCCCTTATCCCATCCACCGGTCTGT  
 CTCGCCTGATCTGGTGAATCGGATCATCAAGCAAGAACCAAGTTCTTGAGAACTGCAGCCAGGAAGTTGTA  
 CAGCACCAAGGCAGACCTGACATGTACGACAACCTCTGGATCTCACGGACGGTACCATCACCTTTACCAACA  
 ACCTCGGCACCATGCCGGAGAGCAGCCCGCCTACAGCATCCCCAGGAAGATGGGCTCCAACCTTGGAAGA  
 CATCTGATGGACGATGCCCTCTCACCTGTTGGAGTACCAGCCACTGCTGTCATCAGTGTGCCAGGA  
 GCTTCAAAAACAAGCAGCCGGAGGAGCAGTATGAGCGCAGAAGAAACGGAGCATGCGTGTAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCTGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja1491\\_e07.zip](https://cdn.origene.com/chromatograms/ja1491_e07.zip)

**Restriction Sites:** SgfI-MluI

**ACCN:** NM\_001178049

**Insert Size:** 1533 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).

**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\\_001178049.1](#), [NP\\_001171520.1](#)

**RefSeq Size:** 4777 bp

**RefSeq ORF:** 1533 bp

**Locus ID:** 17342

**Cytogenetics:** 6 45.05 cM

**Gene Summary:** This transcription factor serves at a critical point between extracellular signaling and downstream targets in cell specification in early eye and neural crest development. Mutant alleles have been identified that generate distinct phenotypes. Some of these alleles are being used to model the human diseases Waardenburg syndrome IIa and Tietz syndrome. [provided by RefSeq, Jul 2008]

**Transcript Variant:** This variant (3) differs in the 5' UTR, lacks a portion of the 5' coding region, and initiates translation at an alternate start codon, compared to variant 1. The encoded isoform (3, also known as Mitf-H) 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.