

Product datasheet for **MG226997**

Mitf (NM_001178049) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Mitf (NM_001178049) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Mitf
Synonyms:	BCC2; Bhlhe32; bw; Gsfbcc2; mi; vit; Vitiligo; Wh
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG226997 representing NM_001178049
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGGCGCTTAGATTTGAGATGCTCATCCCCTGCTCCTTTGAAAGCTTGTGTCTCAGTCTCGAGAGC
 ATTCTGGGGCCTCAAGCCTCCGTTAAGCTCCTCCACTATGACATCACGCATCTTGCTACGCCAGCAACT
 CATGCGTGAGCAGATGCAGGAGCAGGAGCGCAGGGAGCAGCAGCAGAAGCTGCAGGCAGCCAGTTCATG
 CAACAGAGAGTGGCCGTGAGTCAGACACCAGCCATAAACGTCAGCGTGCCACCACCCTTCCCTCTGCCA
 CCCAGGTGCCGATGGAAGTCCTAAGGTGCAGACCCACCTGGAAAACCCACCAAGTACCACATACAGCA
 AGCTCAGAGGCACCAGGTAAAGCAGTACCTTTCTACCCTTTAGCAAATAAACATGCCAGCCAAGTCTGT
 AGCTCACCATGTCCAACCAGCCTGGCGACCATGCCATGCCACCAGTGCCGGGGAGCAGCGCACCCAACA
 GCCCTATGGCTATGCTCACTCTTAACCTCAACTGTGAAAAGAGGCATTTTATAAGTTTGAGGAGCAGAG
 CAGGGCAGAGAGTGAAGTCCCAGGTATGAACACGCACTCTCGAGCGTCGTGCATGCAGATGGATGATGTA
 ATTGATGACATCATCAGCCTGGAATCAAGTTATAATGAAGAAATTTGGGCTTGATGGATCCGGCCTTGC
 AAATGGCAAATACGTTACCCGTCTCTGGAACTTGATCGACCTCTACAGCAACCAGGGCCTGCCACCGCC
 AGGCCTTACCATCAGCAACTCCTGTCCAGCCAACCTTCCCAACATAAAAAGGGAGCTCACAGCGTGTATT
 TTCCCCACAGAGTCTGAAGCAAGAGCATTGGCTAAAGAGAGGCAGAAAAGGACAATCACAACTTGATTG
 AACGAAGAAGAAGATTTAACATAAACGACCCGATTAAGGAGCTAGTACTCTGATCCCAAGTCAAATGA
 TCCAGACATGCGGTGGAACAAGGGAACCATCTCAAGGCCTCTGTGGACTACATCCGGAAGTTGCAACGG
 GAACAGCAACGAGCTAAGGACCTTAAAACCGACAGAAGAAGCTGGAGCATGCGAACCCGGCACCTGCTGC
 TCAGAGTACAGGAGCTGGAGATGCAGGCTAGAGCGCATGGACTTCCCTTATCCCATCCACCGGCTCTGT
 CTCGCCTGATCTGGTGAATCGGATCATCAAGCAAGAACCAGTTCTTGAGAAGTGCAGCCAGGAAGTGTGA
 CAGCACAGGCAGACCTGACATGTACGACAACCTGGATCTCACGGACGGTACCATCACCTTTACCAACA
 ACCTCGGCACCATGCCGGAGAGCAGCCCGCCTACAGCATCCCCAGGAAGATGGGCTCCAACCTTGGGAAG
 CATCCTGATGGACGATGCCCTCTCACCTGTTGGAGTACCAGCCACTGCTGTCATCAGTGTGCCAGGA
 GCTTCAAAAACAAGCAGCCGGAGGAGCAGTATGAGCGCAGAAGAAACGGAGCATGCGTGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG226997 representing NM_001178049
 Red=Cloning site Green=Tags(s)

MEALRFEMLI PCSFESLCLSSAEHSGASKPPLSSSTMTSRILLRQQLMREQMQEQRERREQQKLQAAQFM
 QQRVAVSQTPAINVSVPTTLPSATQVPMEVLKVQTHLENPTKYHIQQAQRHQVKQYLSTTLANKHASQVL
 SSPCPNQP GDHAMPPVPGSSAPNSPMAMLTLSNCEKEAFYKFEEQSRAESEC PGMNTHSRASCMQMDV
 IDDIISLESSYNEEILGLMDPALQMANTLPVSGNLI DLYSNQGLPPPGLTISNSCPANLPNIKRELTACI
 FPTESEARALAKERQKKNHNLIERRRRFNINDRIKELGTLIPKSNPDMRWKGTILKASVDYIRKLQR
 EQQRAKDLENRQKLEHANRHLLLRVQELM QARAHGLSLIPSTGLCSPDLVNRIIKQEPVLENC SQELV
 QHQADLTCTTLDLTDGTTFTNNLGTMPESSPAYSIPRKMGSNLEDILMDDALSPVGVTDPLLSVSPG
 ASKTSSRRSSMSAEETEHA C

TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001178049

ORF Size: 1530 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_001178049.1](#), [NP_001171520.1](#)

RefSeq Size: 4777 bp

RefSeq ORF: 1533 bp

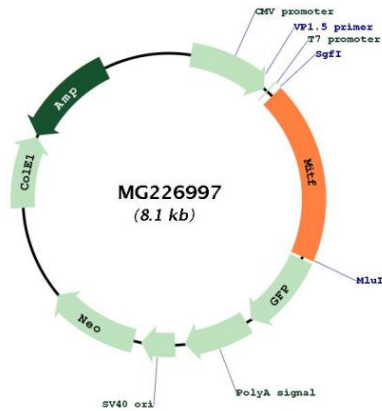
Locus ID: 17342

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]

Product images:



Circular map for MG226997