

Product datasheet for **MG227086**

Mitf (NM_001113198) Mouse Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Mitf (NM_001113198) 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:

>MG227086 representing NM_001113198
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCAGTCCGAATCGGGAATCGTGGCGGATTTCAAGTCGGGAGGAGTTTCACGAAGAACCCAAAACCT
 ATTACGAACCTCAAAGTCAACCTCTGAAGAGCAGCAGTTCTGCAGAGCATTCTGGGGCTCCAAGCCTCC
 GTTAAGCTCCTCCACTATGACATCACGCATCTTGTACGCCAGCAACTCATGCGTGAGCAGATGCAGGAG
 CAGGAGCGCAGGGAGCAGCAGCAGAAGCTGCAGGCAGCCAGTTCATGCAACAGAGAGTGGCCGTGAGTC
 AGACACCAGCCATAAACGTCAGCGTGCCACCACCCTTCCCTCTGCCACCAGGTGCCGATGGAAGTCTT
 TAAGGTGCAGACCACCTGAAAAACCCACCAAGTACCACATACAGCAAGCTCAGAGGCACCAGGTAAG
 CAGTACCTTTCTACCCTTTAGCAAATAAACATGCCAGCCAAGTCTGAGCTCACCATGTCCAAACCAGC
 CTGGCGACCATGCCATGCCACCAGTGCCGGGAGCAGCGCACCCAACAGCCCTATGGCTATGCTCACTCT
 TAACTCCAACGTGAAAAAGAGGCATTTTATAAGTTTGAGGAGCAGAGCAGGGCAGAGAGTGAAGTCCCA
 GGTATGAACACGCACTCTCGAGCGTCGTGCATGCAGATGGATGATGTAATTGATGACATCATCAGCCTGG
 AATCAAGTTATAATGAAGAAATTTGGGCTTGATGGATCCGGCCTTGCAATGGCAATACGTTACCCGT
 CTCTGAAACTTGATCGACCTCTACAGCAACCAGGGCCTGCCACCGCCAGGCCTTACCATCAGCAACTCC
 TGTCCAGCCAACCTTCCCAACATAAAAAGGGAGCTCACAGCGTGTATTTCCCCACAGAGTCTGAAGCAA
 GAGCATTGGCTAAAGAGAGGCAGAAAAAGGACAATCACAACCTTGATTGAACGAAGAAGAAGATTTAACAT
 AAACGACCGCATTAAAGGAGCTAGTACTCTGATCCCAAGTCAAATGATCCAGACATGCGGTGGAACAAG
 GGAACCATCTCAAGGCCTCTGTGGACTACATCCGGAAGTTGCAACGGGAACAGCAACGAGCTAAGGACC
 TTGAAAACCGACAGAAGAAGCTGGAGCATGCGAACCGGCACCTGCTGCTCAGAGTACAGGAGTGGAGAT
 GCAGGCTAGAGCGCATGGACTTTCCCTTATCCCATCCACCGGTCTCTGCTCGCCTGATCTGGTGAATCGG
 ATCATCAAGCAAGAACCAGTTCTTGAGAACTGCAGCCAGGAACCTGTACAGCACCAGGCAGACCTGACAT
 GTACGACAACCTTGATCTCACGGACGGTACCATCACCTTTACCAACAACCTCGGCACCATGCCGGAGAG
 CAGCCCGCCTACAGCATCCCCAGGAAGATGGGCTCCAACCTTGAAGACATCCTGATGGACGATGCCCTC
 TCACCTGTTGGAGTACCGACCCACTGCTGTATCAGTGTGCCAGGAGCTTCAAAAACAAGCAGCCGGA
 GGAGCAGTATGAGCGCAGAAGAACGGAGCATGCGTGT

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>MG227086 representing NM_001113198
 Red=Cloning site Green=Tags(s)

MQSESGIVADFEVGEFHEEPKTYELKSQLKSSSSAEHSGASKPPLSSSTMTSRILLRQQLMREQMQE
 QERREQQKLQAAQFMQQRVAVSQTPAINVSVPTTLPSATQVPMEVLKVQTHLENPTKYHIQQAQRHQVK
 QYLSTTLANKHASQVLSPPCNQPGDHAMPPVPGSSAPNSPMAMTLNSNCEKEAFYKFEEQSRASECP
 GMNTHSRASCMQDDVIDDIISLESSYNEEILGLMDPALQMANTLPVSGNLIDLYSNQGLPPPGLTISNS
 CPANLPNIKRELTAIFPTESEARALAKERQKKNHNLIERRRRFNINDRIKELGTLIPKSNPDMRWNK
 GTILKASVDYIRKLQREQQRAKDLENRQKLEHANRHLRLVQEQLEMQARAHGLSLIPSTGLCSPDLVNR
 IIKQEPVLENCSELVQHQADLTCTTLLDLTDGTITFTNNLGTMPESPAYSIPRKMGSNLEDILMDDAL
 SPVGVTDPDLLSSVSPGASKTSSRRSSMSAEETEHA

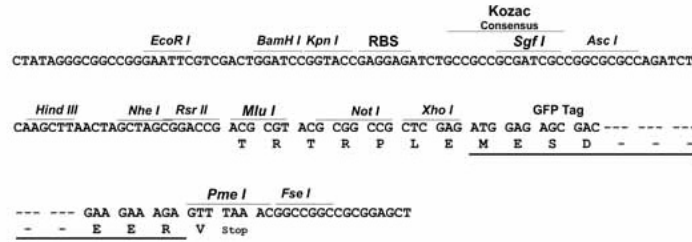
TRTRPLE – GFP Tag – V

Restriction Sites:

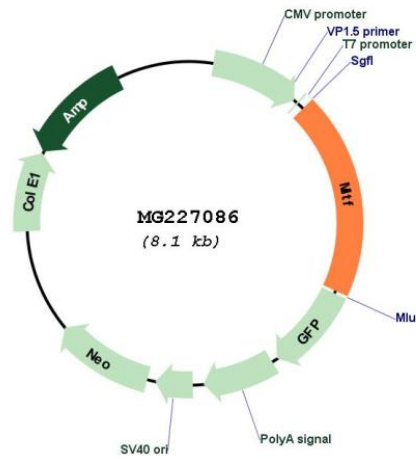
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



| | |
|-------------------------------|---|
| ACCN: | NM_001113198 |
| ORF Size: | 1578 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: | <ol style="list-style-type: none">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_001113198.1 , NP_001106669.1 |
| RefSeq Size: | 4890 bp |
| RefSeq ORF: | 1581 bp |
| Locus ID: | 17342 |
| UniProt ID: | Q08874 |
| 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] |