

## Product datasheet for **MG208151**

### **Tcf4 (BC014293) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Tcf4 (BC014293) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tcf4
Synonyms:	ME2, ITF-2, SEF-2, MITF-2A, MITF-2B, TFE, E2-2, E2.2, ITF2, SEF2, ASP-I2, ITF-2b, SEF2-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG208151 representing BC014293  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGTACTGCGCATACACCATCCCGGCATGGGCGCAACTCTTTGATGTACTACTATAATGGGAAAGCGG  
 TCTACGCTCCTTCAGCCAGCACTGCCACTACAACAGGGATTCCGCCAGGCTATCCTTCTCCAAGCCAGC  
 AGCCAGCACTTTCCCTAGCTCCTTCTTCATGCAAGATGGCCATCACAGCAGCGACCCCTGGAGCTCTCC  
 AGCGGGATGAATCAGCCCGGCTACGGAGGGATGCTGGGCAATTCTTCTCATATCCACAGTCCAGCAGCT  
 ACTGTAGCTGCATCCACATGAACGTTTGGAGCTATCCATCCCCTCCTCGGCAGACATCAACTCCAGTCT  
 TCCTCCGATGTCCAGTTCATCGTAGTGGCACAACCATTACAGCACCTCTTCTGCACACCCCTGCC  
 AACGGAACAGACAGTATAATGGCAAACAGAGGAACTGGGCGAGCAGCAGCTCCCAGACTGGAGACGCTC  
 TGGGAAAGCCCTAGCTTCGATCTATTCTCCTGACCACACGAACAACAGCTTTTCTCCAATCCTTCAAC  
 TCCTGTGGGCTCCCTCCTTCACTCTCAGCAGGCACAGCTGTTTGGTCTAGAAATGGAGGACAGGCTCG  
 TCATCTCCAATTATGAAGGACCCTTGACTCACTGCAAAGCCGAATCGAAGACCCTTGGAAAGACTGG  
 ACGATGCGATTATGTTCTCCGGAACCAGCAGTGGGCCCGTCCACAGCTGTGCCTGGTGGGCATGGGGA  
 CATGCATGGGATCATGGGACCCTCCACAACGGAGCGATGGGTAGCCTGGGCTCAGGGTATGGAAGTGT  
 CTTCTCTCAGCCAACAGACACTCGCTCATGTTGGGGCCACCCTGAAGATGGCGTGGCTCTGAGAGGCA  
 GCCATTCTCTCCTGCCAAACCAGTTCCGGTCCACAACCTCCGGTCCAGTCTGCAACTCCCCTGACTT  
 GAACCCACCCCAAGACCTTACAGAGGGATGCCACCAGGTCTCCAGGGCCAGAGCGTGTCTTCTGGTAGC  
 TCTGAGATCAAAATCCGACGACGAGGGCGATGAGAACCTGCAAGACACAAAATCTTCTGAGGACAAGAAAT  
 TAGATGACGACAAGAAGGATATCAAATCAATTAAGCAATAACGATGATGAGGACCTCACCCAGAGCA  
 GAAGGCTGAGCGGAGAAAGGAACGGAGGATGGCCAATAATGCCCGTGAGCGCTGAGGGTCCGAGATATC  
 AACGAGGCTTTCAAGGAGCTTGGCCGATGGTGCAGCTCCACCTGAAGAGCGACAAGCCCAAGCAAGC  
 TCCTGATTCTCCACCAGGCCGTGGCTGTATCCTCAGCCTGGAGCAGCAAGTTCGAGAAAGGAATCTGAA  
 CCCGAAAGCTGCCTGTCTGAAAAGAAGGGAGGAAGAGAAGGTGTCTCAGAGCCTCCCCACTCTCCTTG  
 GCTGGCCACACCCTGGGATGGGAGACGACGGAATCACATGGGACAGATG

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:**

>MG208151 representing BC014293  
 Red=Cloning site Green=Tags(s)

MYCAYTIPGMGGNSLMYYNKGAVYAPSASTADYNRDSPGYPSSKPAASTFPSSFFMQDGHSSDPWSS  
 SGMNQPGYGGMLGNSSHIPQSSSYCSLHPHERLSYPSSHSSADINSLPMMSTFHRSNTNHYSTSSCTPPA  
 NGTDSIMANRGTGAAGSSQTGDALGKALASIYSPDHTNNSFSSNPSTPVGSPPLSAGTAVWSRNGGQAS  
 SSPNYEGLHSLQSRIEDRLERLDDAIHVLNRHAVGPSTAVPGGHGDMHGIMGPSHNGAMGSLGSGYGT  
 LLSANRHSLMVGAREGVALRGSHSLLPNQVPVQPLPVQSATSPDLNPPQDPYRGMPPGLQGQSVSSGS  
 SEIKSDDEGDENLQDTKSSDKKDDDDKDIKSITSNDDDLTPEQKAEREKERRMANNARERLRVRI  
 NEAFKELGRMVQLHLKSDKPQTKLLILHQAVAVILSLEQQVRERLNPKAACLKRREEEKVSSEPPPLSL  
 AGPHPGMGDAANHMQM

**TRTRPLE** - GFP Tag - V

**Restriction Sites:**

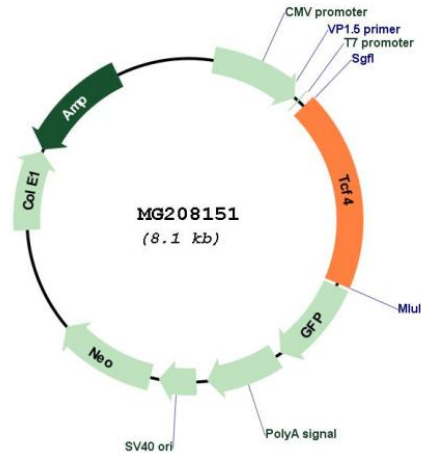
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: BC014293

ORF Size: 1523 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:** [BC014293](#), [AAH14293](#)

**RefSeq Size:** 1765 bp

**RefSeq ORF:** 1523 bp

**Locus ID:** 21413

**Cytogenetics:** 18 E2

**Gene Summary:** Transcription factor that binds to the immunoglobulin enhancer Mu-E5/KE5-motif. Involved in the initiation of neuronal differentiation. Activates transcription by binding to the E box (5'-CANNTG-3'). Isoform 2 inhibits MYOD1 activation of the cardiac alpha-actin promoter. Binds to the E-box present in the somatostatin receptor 2 initiator element (SSTR2-INTR) to activate transcription. May have a regulatory function in developmental processes as well as during neuronal plasticity.[UniProtKB/Swiss-Prot Function]