

Product datasheet for **MG222956**

Tcf4 (NM_001083967) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tcf4 (NM_001083967) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Tcf4
Synonyms:	5730422P05Rik; ASP-I2; bHLHb19; E2-2; E2.2; ITF-2; ITF-2b; ITF2; ME2; MITF-2A; MITF-2B; SEF-2; SEF2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG222956 representing NM_001083967
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCATCACCAACAGCGAATGGCTGCCTTAGGGACGGACAAAGAGCTGAGTGATTTACTGGATTTACAGT
 CGATGTTTTCGCCTCCTGTAAGCAGTGGGAAAAATGGACCAACTTCTTTGGCGAGTGGACATTTCACTGG
 CTCAAATGTAGAAGACAGAAGTAGCTCAGGGTCTGGGAACTGGAGGCCATCCAAGCCCGTCCAGGAAC
 TATGGAGATGGGACTCCCTATGACCACATGACTAGCAGGGATCTTGGGTACATGACAATCTCTCTCCAC
 CTTTTGTCAATCCAGAATACAAAGTAAAAAGAAAGGGGCTCATACTCATCTTATGGGAGAGAAAAAGT
 TCAGGGTTGCCACCAGCAGAGTCTCCTCGGAGGGGACATGGATATGGGCAATCCAGGAACCCCTTCGCCC
 ACCAAACCTGGCTCCAGTACTATCAGTATTCAAGCAATAATGCCCGCCGGAGGCCTCTTCACAGTAGTG
 CCATGGAGGTACAGACAAAGAAAGTCCGAAAAGTCTCCGGTTTGGCGTCTTTCAGTCTACGCTCCTTC
 AGCCAGCACTGCCGACTACAACAGGGACTCGCCAGGCTATCCTTCTCCAAGCCAGCAGCCAGCACTTTC
 CCTAGCTCCTTTCATGCAAGATGGCCATCACAGCAGCGACCCTTGGAGCTCCTCCAGCGGGATGAATC
 AGCCCCGGTACGGAGGGATGCTGGGCAATTCTTCTCATATCCACAGTCCAGCAGCTACTGTAGCCTGCA
 TCCACATGAACGTTTGGCTATCCATCCCCTCCTCGGCAGACATCAACTCCAGTCTTCCCTCCGATGTCC
 ACGTTCCATCGTAGTGGCACAACCACTTACAGCACCTCTTCTGCACACCCCTGCCAACGGAACAGACA
 GTATAATGGCAAACAGAGGAAGTGGGGCAGCAGGCTCGCAGACTGGAGACGCTTAGGGAAAGCCCT
 AGCTTCGATCTATTCTCTGACCACAGCAACAACAGCTTTTCTCCAATCCTTCAACTCCTGTGGGCTCC
 CCTCCTTCACTCTCAGCAGGCACAGCTGTTTGGTCTAGAAATGGAGGACAGGCCTCGTCATCTCCCAATT
 ATGAAGGACCCTTGCACTCACTGCAAAGCCGAATCGAAGACCCTTGGAAAGACTGGACGATGCGATTCA
 TGTTCTCCGGAACCACGAGTGGGCCCGTCCACAGCTGTGCTGGTGGCCATGGGACATGCATGGGATC
 ATGGGACCCTCCCAACCGGAGCGATGGGTAGCCTGGGCTCAGGGTACGGAACTAGTCTTCTCTCAGCCA
 ACAGACACTCGCTCATGTTGGGGCCACCCTGAAGATGGCGTGGCTCTGAGAGGCAGCCATTCTCTCCT
 GCCAAACCAGGTTCCGGTCCCACAACCTCCGGTCCAGTCTGCAACTTCCCCTGACTTGAACCCACCCCAA
 GACCCTTACAGAGGGATGCCACCAGGCCTCCAGGGCCAGAGCGTGTCTTCTGGTAGCTCTGAGATCAAT
 CCGACGACGAGGGCGATGAGAACCTGCAAGACACAAAATCTTCTGAGGACAAGAAATTAGATGACGACAA
 GAAGGATATCAAATCAATTAAGCAATAACGATGATGAGGACCTGACCCAGAGCAGAAGGCTGAGCGC
 GAGAAGGAACGGAGGATGGCCAATAATGCCGTGAGCGCCTGAGGGTCCGAGATATCAACGAGGCTTTCA
 AGGAGCTTGGCCGTATGGTGCAGCTCCACCTGAAGAGCGACAAGCCCAGACCAAGCTCCTGATTCTCCA
 CCAGGCCGTGGCTGTCATCCTCAGCCTGGAGCAGCAAGTTCGAGAAAGGAATCTGAACCCGAAAGCTGCC
 TGTCTGAAAAGAAGGGAGGAAGAGAAGGTGTCCTCAGAGCCTCCCCACTCTCCTTGGCTGGCCACACC
 CTGGGATGGGAGACGCAGCGAATCACATGGGACAGATG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG222956 representing NM_001083967
 Red=Cloning site Green=Tags(s)

MHHQQRMAALGTDKELSDLLDFSAMFSPVSSGKNGPTSLASGHFTGSNVEDRSSSGSWGTTGGHPSPSRN
 YGDGTPYDHMTSRDLGSHDNLSPPFVNSRIQSKTERGSYSSYGRENVQGCHQQLLGGDMDMGNPGLTSP
 TKPGSQYYQYSSNARRRPLHSSAMEVQTKKVRKVPVPLPSSVYAPSASTADYNRDSPGYPSSKPAASTF
 PSSFFMQDGHSSDPWSSSSGMNQPGYGGMLGNSSHIPQSSSYCSLHPHERLSYPHSSADINSSLPMS
 TFHRSGTNHYSTSSCTPPANGTDSIMANRGTGAAGSSQTGDALGKALASIYSPDHTNNSFSSNPSTPVGS
 PPSLSAGTAVWSRNGGQASSSPNYEGPLHSLQSRIEDRLERLDDAIHVLRNHAVGPSTAVPGGHGDMHGI
 MGPSHNGAMGSLGSGYGTSLLSANRHSLMVGAREGVALRGSLSLLPNQVVPVQLPVQSATSPDLNPPQ
 DPYRGMPPGLQGQSVSSGSSEIKSDDEGDENLQDTKSEDKLDDDKDKIKSITSNDDDELTPSEQAER
 EKERRMANNARERLRVRDINEAFKELGRMVQLHLKSDKPQTKLLILHQAVAVILSLEQQVRERNLNPKAA
 CLKRREEEKVSSEPPPLSLAGPHPGMGDAANHMGMQ

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001083967

ORF Size: 1998 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_001083967.1](#), [NP_001077436.1](#)

RefSeq Size: 7135 bp

RefSeq ORF: 2001 bp

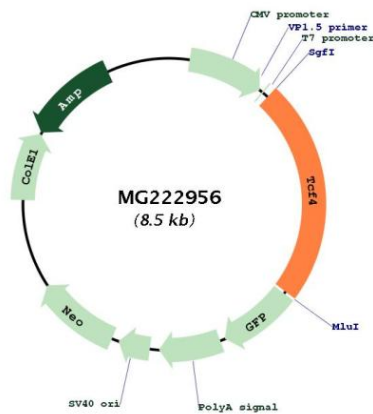
Locus ID: 21413

UniProt ID: [Q60722](#)

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-INR) to activate transcription. May have a regulatory function in developmental processes as well as during neuronal plasticity.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG222956