

Product datasheet for **MR209008**

Tfe3 (NM_172472) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tfe3 (NM_172472) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Tfe3
Synonyms:	bHLHe33; F830016E06Rik; Tcfe3; Tfe-3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR209008 representing NM_172472
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCTCATGCAGCCGAGCCAGCTCGGGACGCCGTAGAGGCCAGCGCGGAGGGCCCTCGAGCCGTGTTCC
 TGCTATTGGAAGAGCGCAGGCCAGCTGAGTCGGCCCAGCTGCTCAGCCTGAATTCCTTGCTCCGGAATC
 CGGGATTGTTGCTGATATCGAGTTAGAAAAACATCCTCGATCCTGACAGCTTCTACGAGCTCAAAAGCCAA
 CCCCTATCCCTCCGCTCCAGCCTCCCAATCACTGCAGGCCACACCGACCACCCAGCTACACTCTCTG
 CGTCGTCTTTCGAGGGGGCTCCCGACCCTGCCATGTCATCTTCTTCATCACGGGTCTTGCTGCGTCA
 GCAGCTTATGAGGGCCAGGCTCAGGAACAGGAGAGGCGTGAGCGGGGGAACAGGCAGCGGCCGCTCCC
 TTCCCAGCCCTGCGCCCGCTCACCAGCCATCTCTGTGATTGGCGTGTCTGCTGGTGGCCACACTGA
 GTCGTCCACCTCTGCTCAGGTGCCAGGGAGGTACTCAAGGTTCAAGCCACCTCGAGAACCCTACAGC
 CTACCACCTGCAGCAAGCTCGCCGGCAGCAGGTCAAACAGTACTTGTCTACCACACTTGGGCCAAAGCTG
 GCTTCCCAGGCTCTACCCACCACAGGGCCTTCCAGTGCCAGCCACTTCTGCCCTGAAACTGCTC
 ATGCCACCGTCTACAGGCAGTCTCCTAACAGCCCATGGCGTGTCTACCATTGGGTCCAGCTCAGA
 AAAGGAGATTGATGATGTCATTGATGAGATCATCAGCCTGGAGTCCAGTTACAACGATGAGATGCTCAGC
 TATCTTCCAGGAGGCACTGCAGGGCTGCAGTCCCCAGCACGCTGCCGGTGTCTGGAAATCTACTTGATG
 TGTACAGCAGTCAGGGAGTGGCTACCCAGCTATCACCGTCAGCAATTCCTGTCCAGCTGAGTGCCTAA
 CATCAAACGCGAGATCTCCGAAACCGAGGCAAAGGCCCTTTTGAAGGAGCGACAGAAGAAAGACAATCAC
 AACCTAATTGAACGACGAGCGGATTCAACATTAACGATAGGATCAAAGAGCTGGGCACCCTCATCCCCA
 AGTCCAATGATCCGAGATGCGCTGGAACAAGGCACCATCCTGAAGGCATCTGTGGATTACATCCGCAA
 ATTACAGAAGGAACAGCAACGCTCCAAAGACTGGAGAGCCGGCAGCGGTCCTGGAACAAGCCAACCGA
 AGCCTGCAGTCCGGATTAGGAGCTAGAACTGCAGGCCAGATCCATGGTCTGCCAGTCCCTCCCAACC
 CAGGACTGCTCTCCTAACCACGAGTTCGGTCTCTGACAGCCTCAAGCCAGAACAGCTGGACATTGAGGA
 GGAGGGCAGGCCAGCACAACGTTCCATGTATCGGGAGGACCTGCCAGAACGCTCCTCCACAACAGCCT
 CCAGCACCACTTCGGATGCCCTTCTGGACCTACACTTCCCAGCGACCCTTGGGAGACCTGGGGGACC
 CCTTCCACCTAGGGCTAGAGGACATTCTGATGGAGGAGGGGGATGGTGGGAGGACTGTCAGGGGTGTC
 CCTGTCCCCTGCGGGTCTTCTGACCCCTGCTTCTTTCAGTATCCCCGGCTGTTTCCAAGGCCAGC
 AGCCGCCGTAGCAGTTCAGCATGGAAGAGGAGTCC

ACGCGTACGCGGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>MR209008 representing NM_172472
 Red=Cloning site Green=Tags(s)

MSHAAEPARDAVEASAEGPRAVFLLEERRPAESAQLLSLNSLLPESGIVADIELENILDPSFYELKSQ
 PLSLRSSLPISLQATPTTPATLSASSSAGSRTPAMSSSSRVLLRQQLMRAQAQEQERRERREQAAAAP
 FSPAPASPAISVIGVSAGGHTLSRPPPAQVPREVLKVQTHLENPTRYHLQQARRQVKQYLSTTLGPKL
 ASQALTPPPGSSAQPLPAPETAHATGPTGSAPNSPMALLTIGSSSEKEIDDVIDEIIISLESSYNDEMLS
 YLPGGTAGLQLPSTLPVSGNLLDVYSSQGVATPAITVSNSCPaelPNIKREISETAKALLKERQKDNH
 NLIERRRRFNINDRIKELGTLIPKSNDEMRWNGTILKASVDYIRKLQKEQQRSKDLESRQRSLEQANR
 SLQLRIQELELQAQIHGLPVPPNPGLLSLTTSSVSDSLKPEQLDIEEGRPSTTFHVSGGPAQNAPPQP
 PAPPSDALLDLHFPSDHLGDLGDPFHLGLEILMEEEGMVGGLSGGALSPLRAASDPLLSVSPAVSKAS
 SRRSSFMEES

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mm9036_d05.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_172472

ORF Size: 873 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 Size: 3293 bp

RefSeq ORF: 1719 bp

Locus ID: 209446

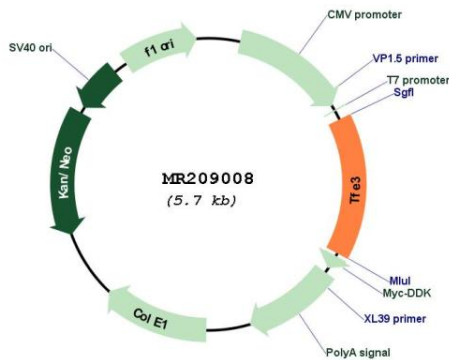
UniProt ID: [Q64092](#)

Cytogenetics: X 3.5 cM

MW: 61.9 kDa

Gene Summary:

Transcription factor that specifically recognizes and binds E-box sequences (5'-CANNTG-3') (PubMed:16936731). Efficient DNA-binding requires dimerization with itself or with another MiT/TFE family member such as TFEB or MITF (PubMed:16936731). In association with TFEB, activates the expression of CD40L in T-cells, thereby playing a role in T-cell-dependent antibody responses in activated CD4(+) T-cells and thymus-dependent humoral immunity (PubMed:16936731). Specifically recognizes the MUE3 box, a subset of E-boxes, present in the immunoglobulin enhancer (By similarity). It also binds very well to a USF/MLTF site (By similarity). May regulate lysosomal positioning in response to nutrient deprivation by promoting the expression of PIP4P1 (PubMed:29146937).[UniProtKB/Swiss-Prot Function]

Product images:


Circular map for MR209008