

## Product datasheet for **MC227849**

### Tfe3 (NM\_001271490) Mouse Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Tfe3 (NM_001271490) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Tfe3
Synonyms:	bHLHe33; F830016E06Rik; Tcfe3; Tfe-3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >MC227849 representing NM\_001271490  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTCATCTTCTTCATCACGGGTCTTGCTGCGTCAGCAGCTTATGAGGGCCAGGCTCAGGAACAGGAGA  
 GCGGTGAGCGGCCGGAACAGGCAGCGGCCGCTCCCTTCCCAGCCCTGCGCCCGCTCACCAGCCATCTC  
 TGTGATTGGCGTGTCTGCTGGTGCCACACACTGAGTCGTCACCTCCTGCTCAGGTGCCAGGGAGGTA  
 CTCAAGTTTACAGCCACCTCGAGAACCCTACACGCTACCACTGCAGCAAGCTCGCCGGCAGCAGGTCA  
 AACAGTACTTGTCTACCACACTTGGGCCAAGCTGGCTTCCCAGGCTCTCACCCACCACAGGGCCTTC  
 CAGTGCCAGCCACTTCTGCCCTGAACTGCTCATGCCACGGTCTACAGGCAGTGTCTTAACAGC  
 CCCATGGCGCTGCTCACCATTGGTCCAGCTCAGAAAAGGAGATTGATGATGTCATTGATGAGATCATCA  
 GCCTGGAGTCCAGTTACAACGATGAGATGCTCAGCTATCTTCCAGGAGGCACTGCAGGGCTGCAGCTCCC  
 CAGCACGCTGCCGGTGTCTGAAATCTACTTGATGTGTACAGCAGTCAGGGAGTGGCTACCCAGCTATC  
 ACCGTCAGCAATTCCTGTCCAGCTGAGCTGCCTAACATCAAACGCGAGATCTCCGAAACCGAGGCAAGG  
 CCCTTTTGAAGGAGCGACAGAAGAAAGACAATCAACCTAATTGAACGACGCGAGGCGATTCAACATTAA  
 CGATAGGATCAAAGAGCTGGGCACCCTCATCCCAAGTCCAATGATCCGGAGATGCGCTGGAAACAAGGGC  
 ACCATCTGAAGGCATCTGTGGATTACATCCGCAATTACAGAAGGAACGACGCAACGCTCCAAAGACCTGG  
 AGAGCCGGCAGCGGTCCCTGGAACAAGCCAACCGAAGCTGCAGCTCCGGATTAGGAGCTAGAAGTCA  
 GGCCAGATCCATGGTCTGCCAGTCCCTCCCAACCCAGGACTGCTCTCCCTAACCCAGGATTCGGTCTCT  
 GACAGCCTCAAGCCAGAACAGCTGGACATTGAGGAGGAGGGCAGGCTAGCACAACGTTCCATGTATCGG  
 GAGGACCTGCCAGAACGCTCCTCCACAACAGCCTCCAGCACCTTCCGATGCCCTTCTGGACCTACA  
 CTTTCCCAGCGACCACTTGGGAGACCTGGGGACCCCTTCCACCTAGGGCTAGAGGACATTCTGATGGAG  
 GAGGAGGGGATGGTGGGAGGACTGTGAGGGGTGCCCTGTCCCCACTGCGGGCTGCTTCTGACCCCTGC  
 TTTCTTCAAGTATCCCGGCTGTTTCCAAGGCCAGCAGCCGCGTAGCAGCTTCAAGGAGGAGTCA  
**CTGA**

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

- Restriction Sites:** Sgfl-Mlul
- ACCN:** NM\_001271490
- Insert Size:** 1404 bp
- OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
- OTI Annotation:** Clone contains native stop codon, and expresses the complete ORF without any c-terminal tag.
- 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\\_001271490.1](#), [NP\\_001258419.1](#)

**RefSeq Size:** 3446 bp

**RefSeq ORF:** 1404 bp

**Locus ID:** 209446

**UniProt ID:** [Q64092](#)

**Cytogenetics:** X 3.5 cM

**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] Transcript Variant: This variant (5) uses an alternate splice site in the 5' exon, compared to variant 1, and initiates translation at a downstream in-frame start codon. The encoded isoform (c) has a shorter N-terminus, compared to isoform a. Variants 3, 4, and 5 encode the same isoform (c). Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.