

Product datasheet for **MC218106**

Tfeb (NM_001161723) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tfeb (NM_001161723) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Tfeb
Synonyms:	bHLHe35; Tcfef
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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Fully Sequenced ORF: >MC218106 representing NM_001161723
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGCGTCACGCATCGGGCTGCGCATGCAGCTCATGCGGAGCAGGCCAGCAGGAGGAGCAGCGAGAGC
 GCATGCAGCAGCAGGCTGTCATGCATTATATGCAACAGCAGCAGCAGCAGCAGCAGCAGCTGGGTGGGCC
 CCCCACCCAGCCATCAACACCCCTGTCCACTTCCAGTCGCCCCCGCCTGTGCCCGGGAGGTGTGAAG
 GTGCAGTCCTACCTGGAGAACCCACCTCTACCACTGCAACAGTCCCAGCATCAGAAGGTTTCGGGAGT
 ATCTGTCTGAGACCTATGGGAACAAGTTTGTGCCACGTGAGCCAGCCCAAGGTTCCCGAAGCCTGC
 CCCAGCAGCATCCCCAGGGGTGCGGGCTGGACACGTACTGTCCACCTCGCCGGCAACAGTGTCCCAAC
 AGTCCCATGGCCATGCTACATATCAGCTCCAACCCGAGAAAGAGTTTGATGATGTCATTGACAACATTA
 TGGCCTGGACAGCGTGTGGGCTACATCAACCTGAGATGCAGATGCCTAACACGCTGCCCTGTCTAG
 CAGCCACCTGAACGTGTACAGCGGTGACCCCGAGTACAGCCTCCATGGTGGGTGTACCAGCAGCTCC
 TGCCCTGCCGACCTGACTCAGAAAGCAGAGCTAACAGATGCTGAGAGCAGAGCCCTGGCCAAGGAGCGGC
 AGAAGAAAGACAATCACAACCTAATTGAGAGAAGACGCAGGTTCAACATCAATGACCGGATCAAGGAGCT
 GGGAATGCTGATCCCCAAGGCCAACGACCTGGACGTGCGCTGGAACAAAGGCACCATCTCAAGGCCTCT
 GTGGATTACATCCGGAGGATGCAGAAGGACCTGCAGAAGTCCCGGGAGCTGGAGAACCACTCCCGCGCC
 TGGAGATGACTAACAAGCAGCTCTGGCTCCGCATCCAGGAGCTGGAGATGCAGGCACGCTGCACGGCT
 CCCCACCACTCGCGTGGGTGTGAATATGGCCGAGCTGGCCAGCAGGTGGTGAAGCAAGAGTTGCC
 AGTGAGGATGGCCAGGGGAGGCGCTGATGCTGGGCGCTGAGGTCCCTGAGCCTGAGCAATGCCGGCTC
 TTCCTCCCAGGCTCCGCTGCCCTCGGCCGCCAGCCACAGTCTCCGTTCCATCACCTGGACTTCAGCCA
 TGGCCTGAGCTTTGGGGGTGGGGGCGACGAGGGGCCACAGGTTACCCCGATACCTGGGGACAGAGCAC
 GGCTCCCCATTCCCCAACCTGTCCAAGAAGGATCTGGACTTAATGCTCCTAGATGACTCCCTGCTCCCC
 TGGCCTCTGACCCCTCTTTCTACCATGTCTCTGAGGCTCCAAGGCCAGCAGCCCGGAGCAGCTT
 CAGCATGGAGGAGGTGATGTTCTG**TGA**

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
 TGGATTACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: SgfI-RsrII

ACCN: NM_001161723

Insert Size: 1428 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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](#)

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:	<u>NM_001161723.1, NP_001155195.1</u>
RefSeq Size:	2351 bp
RefSeq ORF:	1428 bp
Locus ID:	21425
UniProt ID:	<u>Q9R210</u>
Cytogenetics:	17 23.99 cM
Gene Summary:	<p>Transcription factor that specifically recognizes and binds E-box sequences (5'-CANNTG-3'). Efficient DNA-binding requires dimerization with itself or with another MIT/TFE family member such as TFE3 or MITF. In association with TFE3, 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. Specifically recognizes and binds the CLEAR-box sequence (5'-GTCACGTGAC-3') present in the regulatory region of many lysosomal genes, leading to activate their expression. It thereby plays a central role in expression of lysosomal genes. Acts as a positive regulator of autophagy by promoting expression of genes involved in autophagy. Specifically recognizes the gamma-E3 box, a subset of E-boxes, present in the heavy-chain immunoglobulin enhancer. Plays a role in the signal transduction processes required for normal vascularization of the placenta. Regulates lysosomal positioning in response to nutrient deprivation by promoting the expression of PIP4P1 (PubMed:29146937). [UniProtKB/Swiss-Prot Function]</p> <p>Transcript Variant: This variant (3) differs in the 5' UTR and coding sequence compared to variant 1. The resulting isoform (b) is shorter at the N-terminus compared to isoform a. Variants 2 and 3 both encode isoform b. 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.</p>