OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for MC216481

Tfeb (NM_001161722) Mouse Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Tfeb (NM_001161722) Mouse Untagged Clone
Tag:	Tag Free
Symbol:	Tfeb
Synonyms:	bHLHe35; Tcfeb
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

Fully Sequenced ORF:

>MC216481 representing NM_001161722
Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCGTCACGCATCGGGCTGCGCATGCAGCTCATGCGGGAGCAGGCCCAGCAGGAGGAGCAGCGAGAGC
GCATGCAGCAGCAGGCTGTCATGCATTATATGCAACAGCAGCAGCAGCAGCAGCAGCTGGGTGGGCC
CCCCACCCCAGCCATCAACACCCCTGTCCACTTCCAGTCGCCCCCGCCTGTGCCCGGGGAGGTGCTGAAG
GTGCAGTCCTACCTGGAGAACCCCACCTCCTACCACCTGCAACAGTCCCAGCATCAGAAGGTTCGGGAGT
ATCTGTCTGAGACCTATGGGAACAAGTTTGCTGCCCACGTGAGCCCAGCCCAAGGTTCCCCGAAGCCTGC
CCCAGCAGCATCCCCAGGGGTGCGGGCTGGACACGTACTGTCCACCTCGGCCGGCAACAGTGCTCCCAAC
AGTCCCATGGCCATGCTACATATCAGCTCCAACCCCGAGAAAGAGTTTGATGATGTCATTGACAACATTA
TGCGCCTGGACAGCGTGCTGGGCTACATCAACCCTGAGATGCAGATGCCTAACACGCTGCCCCTGTCTAG
CAGCCACCTGAACGTGTACAGCGGTGACCCCCAGGTCACAGCCTCCATGGTGGGTGTCACCAGCAGCTCC
TGCCCTGCCGACCTGACTCAGAAGCGAGAGCTAACAGATGCTGAGAGCAGAGCCCTGGCCAAGGAGCGGC
AGAAGAAAGACAATCACAACCTAATTGAGAGAAGACGCAGGTTCAACATCAATGACCGGATCAAGGAGCT
GGGAATGCTGATCCCCAAGGCCAACGACCTGGACGTGCGCTGGAACAAAGGCACCATCCTCAAGGCCTCT
GTGGATTACATCCGGAGGATGCAGAAGGACCTGCAGAAGTCCCGGGAGCTGGAGAACCACTCCCGGCGCC
TGGAGATGACTAACAAGCAGCTCTGGCTCCGCATCCAGGAGCTGGAGATGCAGGCACGCGTGCACGGCCT
CCCCACCACCTCGCCGTCGGGTGTGAATATGGCCGAGCTGGCCCAGCAGGTGGTGAAGCAAGAGTTGCCC
AGTGAGGATGGCCCAGGGGAGGCGCTGATGCTGGGGCCTGAGGTCCCTGAGCCTGAGCAAATGCCGGCTC
TTCCTCCCCAGGCTCCGCTGCCCTCGGCCGCCCAGCCACAGTCTCCGTTCCATCACCTGGACTTCAGCCA
TGGCCTGAGCTTTGGGGGTGGGGGCGACGAGGGGCCCACAGGTTACCCCGATACCCTGGGGACAGAGCAC
GGCTCCCCATTCCCCAACCTGTCCAAGAAGGATCTGGACTTAATGCTCCTAGATGACTCCCTGCTCCCCC
TGGCCTCTGACCCCCTCTTTTCTACCATGTCTCCTGAGGCCTCCAAGGCCAGCAGCCGCCGGAGCAGCTT
CAGCATGGAGGAGGGTGATGTTCTGTGAACGCGT

ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGA
TTACAAGGATGACGACGATAAGGTTTAA

Chromatograms: https://cdn.origene.com/chromatograms/ja1933_d08.zip

Restriction Sites: SgfI-RsrII

ACCN: NM_001161722

Insert Size: 1434 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:	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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_001161722.1, NP_001155194.1
RefSeq Size:	2357 bp
RefSeq ORF:	1428 bp
Locus ID:	21425
UniProt ID:	Q9R210
Cytogenetics:	17 23.99 cM
Gene Summary:	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] Transcript Variant: This variant (2) 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.