

Product datasheet for **SC122773**

TFEB (NM_007162) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TFEB (NM_007162) Human Untagged Clone
Tag:	Tag Free
Symbol:	TFEB
Synonyms:	ALPHATFEB; BHLHE35; TCFEB
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF:

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>OriGene sequence for NM_007162 edited
GGCCGGGCGGGCATGGGCCTTCCCGGCCGGAGCTGGGAGTCTGAAGGGGCGGGAGGCGTG
ATGGTGAACCTCGCAAGAAGTTTGAAGGACGCGCGGGCCCCGCGCCACTCCCCCTCCACC
GGACACGGCTGGGGCCGGCGATGCCTGAGAGGGGGTGGAGGACGAGTGAACATATATG
CATGTACAGTGTGGATCCTCATCTGAGAGGAGGGAGATGAAAACACCCACCTCACAGG
CTGTTGTGAGGACTAAGGGTGGCGCAGTGCCTGGTACATGGGAGCCAGCGCCGGCAGCCA
CCATGGCGTCACGCATAGGGTTGCGCATGCAGCTCATGCGGGAGCAGGCGCAGCAGGAGG
AGCAGCGGGAGCGCATGCAGCAACAGGCTGTCATGCATTACATGCAGCAGCAGCAGCAGC
AGCAACAGCAGCAGCTCGGAGGGCCGCCACCCCGGCCATCAATACCCCGTCCACTTCC
AGTCGCCACCACCTGTGCCTGGGGAGGTGTTGAAGGTGCAGTCTACCTGGAGAATCCCA
CATCTACCATCTGCAGCAGTGCAGCATCAGAAGGTGCGGGAGTACCTGTCGAGACCT
ATGGGAACAAGTTTGTGCCACATCAGCCAGCCAGGGCTCTCGAAACCCCAACCAG
CCGCTCCCAAGGGTGGAGCTGGACACGTGCTGCTCCTCCGCTGGCAACAGTGCTC
CCAATAGCCCATGGCCATGCTGCACATTGGCTCCAACCTGAGAGGGAGTTGGATGATG
TCATTGACAACATTATGCGTCTGGACGATGCTTGGCTACATCAATCCTGAAATGCAGA
TGCCCAACACGCTACCCCTGTCCAGCAGCCACCTGAATGTGTACAGCAGGACCCCAAGG
TCACAGCTCCCTGGTGGGCGTACCAGCAGCTCCTGCCCTGCGGACCTGACCCAGAAGC
GAGAGCTCACAGATGCTGAGAGCAGGGCCCTGGCCAAGGAGCGGCAAGAAAGACAATC
ACAACCTAATTGAAAGGAGACGAAGGTTCAACATCAATGACCGCATCAAGGAGTTGGAA
TGCTGATCCCCAAGGCCAATGACCTGGACGTGCGCTGGAACAAGGGCACCATCCTCAAGG
CCTCTGTGGATTACATCCGGAGGATGCAGAAGGACCTGCAAAAAGTCCAGGGAGCTGGAGA
ACCACTCTGCGCCCTGGAGATGACCAACAAGCAGCTCTGGCTCCGTATCCAGGAGCTGG
AGATGCAGGCTCGAGTGCACGGCTCCCTACCACCTCCCGTCCGGCATGAACATGGCTG
AGCTGGCCAGCAGGTGGTGAAGCAGGAGCTGCCTAGCGAAGAGGGCCCAAGGGGAGGCC
TGATGCTGGGGGCTGAGTCCCTGACCCTGAGCCACTGCCAGCTCTGCCCCGCAAGCCC
CGCTGCCCTGCCACCCAGCCACCATCCCATTCATCACCTGGACTTCAGCCACAGCC
TGAGCTTTGGGGCAGGGAGGACGAGGGTCCCCCGGGCTACCCGAACCCCTGGCGCCGG
GGCATGGCTCCCATCCCAAGCCTGTCCAAGAAGGATCTGGACCTCATGCTCCTGGACG
ACTCACTGCTACCGCTGGCCTCTGATCCACTTCTGTCCACCATGTCCCCGAGGCCTCCA
AGGCCAGCAGCCCGGAGCAGCTTCAAGCATGGAGGAGGGCGATGTGCTGTGACCCTGGC
TGCCCTGTGCCAGGGAACAGGGGCCGGCCTGGGGGCTGGGAGGGCCAGGGGCACCTCCC
TCCCACCTTCAGGCTGCACTGTGTGTAAGTAGCCACCTGCCCTGCCTCCCTCCTCCCC
GTTGGCCCTGTTTGGACTTAGTGCCTGTCTGGCAGCCTGTGGGGTCAAGGAGAAGCACCC
CCAGGGCAGCCCTCTTACTGGCGCAGTGGGAAGAGGCCTTACGCCCTCTCCCGGAGAT
GGAATCGCGGGCAGGGAGGGGAGGGTGTCTAGAGGTGAGAAGAGGGCCTGGTGGAGA
TTCCCTGTCTTCTGAGCCGAGCCCTCATTACCAGTGAAGGACATGCTTGAAGGGTTCC
GGAAGCTCCTCATCTGAGGCACTGGTCTGGGGGTGCTCAGGCCTGCCTTTTGGGACT
CAGATGGCAGGAGGTCCACCCCGCAGCTGGTCTCGGCTCTCCACAGGTGGGCACCCC
CCACTTTGGTGCTAATAGCTCTCCACCAGTGGTGTGAGCGCGGGGGCTGCCAGAAGCGG
GAGGGGTCACTGCCGGAAGAGCAGCTGCCCTCCGACCCCTCACTTTGTGCCTTTAGTAAA
CACTGTGCTTTGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_007162 unedited CCGTACAAATTTTGTAAATACGACTCACTATAGNNGGCGGCCGCGNAATCCCGGGATGGC CCGGCGGGCATGGGCCTTCCCGGCCGGAGCTGGGAGTCGAAGGGGCGGGAGGCGTGATG GTGAACTCGAAGAAGTTTGAGGGACGCGCGGGCCCCGCGCCACTCCCCCTCCACCGGA CACGGCTGGGGCCGGCGATGCCTGAGAGGGGTGGGAGGACGAGTGAACATATATGCAT GTACAGTGTGGATCCTCATCTGAGAGGAGGAGATGAAAAACACCCACCTCACAGGCTG TTGTGAGGACTAAGGGTGGCGCAGTGCCCTGGTACATGGGAGCCAGCGCCGCGAGCCACCA TGGCGTCACGCATAGGGTTGCGCATGCAGCTCATGCGGGAGCAGCGCAGCAGGAGGAGC AGCGGGAGCGCATGCAGCAACAGGCTGTCATGCATTACATGCAGCAGCAGCAGCAGCAGC AACAGCAGCAGCTCGGAGGGCCGCCACCCCGGCCATCAATACCCCGTCCACTTCCAGT CGCCACCACCTGTGCCTGGGGAGGTGTTGAAGGTGCAGTCTACCTGGAGAATCCACAT CCTACCATCTGCAGCAGTCGAGCATCAGAAGGTGCGGGAGTACCTGTCCGAGACCTATG GGAACAAGTTTGCTGCCACATCAGCCCAGCCAAAGGCTCTCCGAAACCCCCACAGCCGC CTCCCAGGGTGGAGCTGGAACGTGCTGCTCCTCCTCCGCTGGCAACAGTGTCCCAATT ACCCCATGGGCGAGCTGCACATTGGGCTCCAACCTGTAAGGGAGTGGGATAATGTCATT GGACAACCTATGCCTTCGGGCCAAGGCCCTTGGCTACATCAACCCTGAAAGGCAAATGCC CACCACGCTACCCTGGG</p>
Restriction Sites:	Please inquire
ACCN:	NM_007162
Insert Size:	2446 bp
OTI Disclaimer:	<p>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.</p> <p>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</p>
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:	NM_007162.1 , NP_009093.1
RefSeq Size:	2446 bp

RefSeq ORF:	1431 bp
Locus ID:	7942
UniProt ID:	P19484
Cytogenetics:	6p21.1
Protein Families:	Druggable Genome, Transcription Factors
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 MTF. 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 (1) contains an alternate 5' sequence, which results in a downstream AUG start codon, compared to variant 2. The resulting isoform (1) has a shorter N-terminus, compared to isoform 2. Variants 1, 3 and 4 encode the same isoform 1.</p>