

Product datasheet for RC207153L2

TFEB (NM_007162) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: TFEB (NM_007162) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: TFEB

Synonyms: ALPHATFEB; BHLHE35; TCFEB

Mammalian Cell None

Selection:

Vector: pLenti-C-mGFP (PS100071)

E. coli Selection: Chloramphenicol (34 ug/mL)

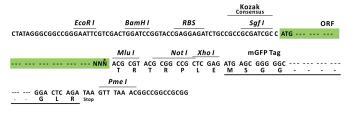
ORF Nucleotide The ORF insert of this clone is exactly the same as(RC207153).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





st The last codon before the Stop codon of the ORF.

ACCN: NM_007162

ORF Size: 1428 bp



OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

CN: techsupport@origene.cn

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com

TFEB (NM_007162) Human Tagged Lenti ORF Clone - RC207153L2

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: <u>NM 007162.1</u>

 RefSeq Size:
 2364 bp

 RefSeq ORF:
 1431 bp

 Locus ID:
 7942

 UniProt ID:
 P19484

Cytogenetics: 6p21.1

Protein Families: Druggable Genome, Transcription Factors

MW: 52.9 kDa

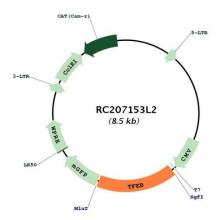
Gene Summary: Transcription factor that specifically recognizes and binds E-box sequences (5'-CANNTG-3').

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).

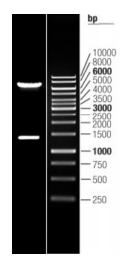
[UniProtKB/Swiss-Prot Function]



Product images:



Circular map for RC207153L2



Double digestion of RC207153L2 using Sgfl and Mlul