

## **Product datasheet for TP760282**

## OriGene Technologies, Inc.

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## TFEB (NM\_007162) Human Recombinant Protein

**Product data:** 

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human transcription factor EB (TFEB), transcript variant 1, full length,

with N-terminal HIS tag, expressed in E.Coli, 50ug

Species: Human
Expression Host: E. coli

Expression cDNA Clone

or AA Sequence:

A DNA sequence encoding human full-length TFEB

Tag: N-His

Predicted MW: 52.7 kDa

Concentration:  $>0.05 \mu g/\mu L$  as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, pH 8.0, 150 mM NaCl, 1% sarkosyl, 10% glycerol

**Bioactivity:** Binding assay (PMID: <u>27172265</u>)

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** NP 009093

**Locus ID:** 7942

UniProt ID: <u>P19484</u>, <u>A0A024RCY3</u>

RefSeq Size: 2364
Cytogenetics: 6p21.1
RefSeq ORF: 1428

Synonyms: ALPHATFEB; BHLHE35; TCFEB





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]

**Protein Families:** 

Druggable Genome, Transcription Factors

## **Product images:**

