

PRODUCT INFORMATION

Product name : TFEB antibody

Product type : Primary antibodies

Description : Rabbit polyclonal to TFEB

Immunogen : 3 synthetic peptides (human) conjugated to KLH

Reacts with : Human, Mouse

Tested applications : ELISA, WB and IF

GENE INFORMATION

Gene Symbol : TFEB

Gene Name : transcription factor EB

Ensembl ID : ENSG00000112561

Entrez GeneID : 7942

GenBank Accession number : M33782

Omim ID : 600744

Swiss-Prot : P19484

Molecular weight of TFEB : 52.9kDa [Isoform1]
43.8kDa [Isoform2]

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

Expected subcellular localization : Cytoplasm and Nucleus. Note: Mainly present in the cytoplasm. Under aberrant lysosomal storage conditions, it translocates from the cytoplasm to the nucleus.

APPLICATION NOTE

Recommended dilution :

- **ELISA:** Antibody specificity was verified by direct ELISA against the 3 immunogen peptides. A minimum titer of 1/1000 is determined. Appropriate specificity controls were run.
- **WB:** 1/2500.
- **IF:** 1/500.

Optimal dilutions/concentration should be determined by the end user.

Raised in : Rabbit

Clonality : Polyclonal

Isotype : IgG

Purity : Purified Antibody

Storage buffer: 0.5 X PBS containing a final concentration of 50% Glycerol, 0.1% BSA and 0.01% Thimerosal.

Form : Liquid

Storage instruction : Store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.

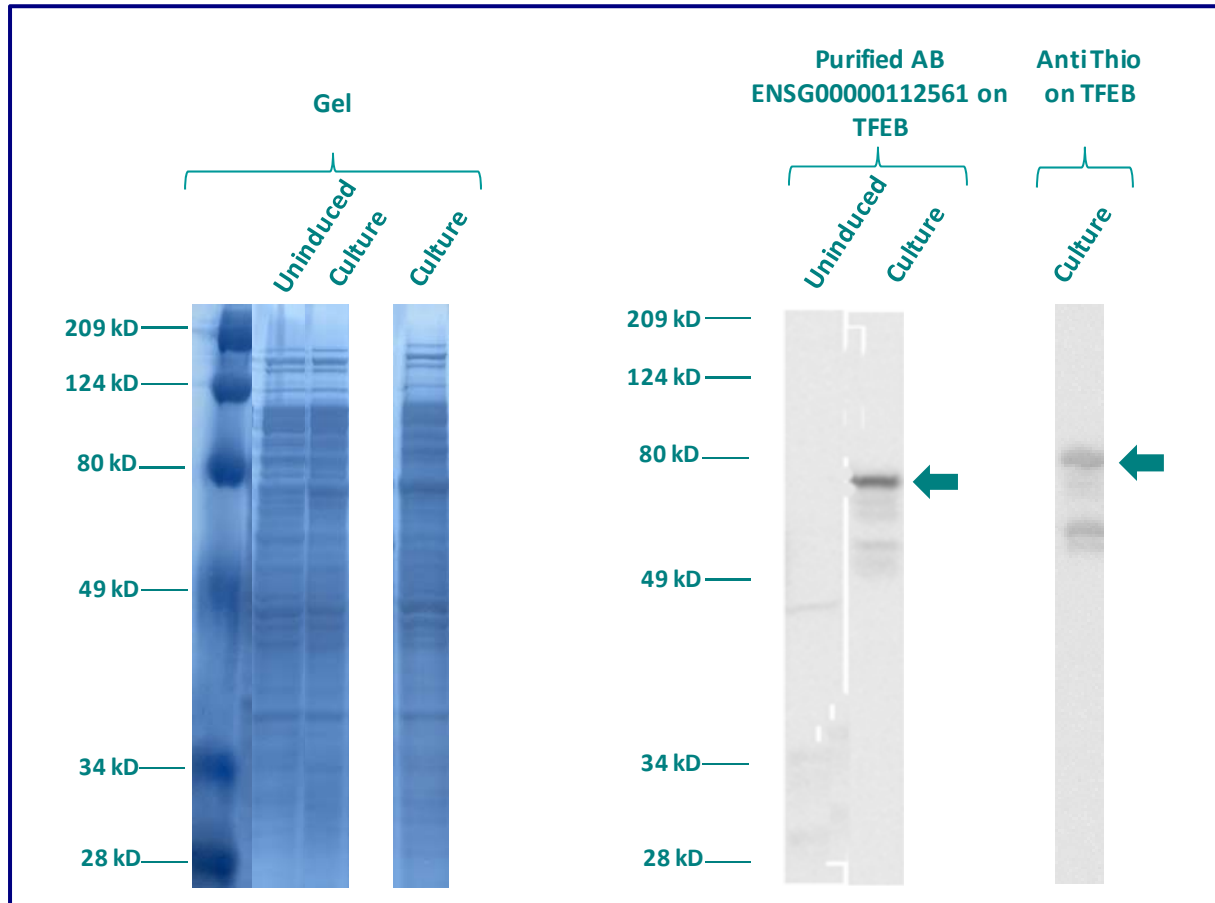
WESTERN BLOT ON RECOMBINANT PROTEIN

The purified antibody ENSG00000112561 has been tested at 1/20000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells).

An anti-Thio (positive control) has been tested at 1/5000 on uninduced (negative control) and induced culture of E.coli (one shot Top10 competent cells) as a positive control.

Plasmid name : pBAD-DEST49.

Molecular weight of TFEB : 66.9kDa (52.9kDa + another 14kDa for the tag).



Gel concentration: 10%

Blocking: in 5% non-fat milk-PBST solution

1st Antibody: The antibodies are diluted in blocking buffer.

- Dilute the purified antibody ENSG00000112561 at 1: 2500
- Dilute the anti-thio at 1:5000

60 minutes of incubation

2nd Antibody: The antibody is diluted in blocking buffer.

- Dilute the anti-Rabbit IgG HRP conjugated at 1/10000
- 60 minutes of incubation

IMMUNOFLUORESCENCE ANALYSIS

Immunofluorescence analysis of Transcription factor EB (TFEB) expression in 2 cells lines (HELA, Capan-2). The purified Antibody ENSG00000112561 has been tested at 1/1000.

Red staining : cytoskeleton (microtubules/ α -tubuline)

Blue staining : nucleus (Hoechst)

Green staining : anti- TFEB antibody (purified)

Expected subcellular location : Cytoplasm. Nucleus.

Note: Mainly present in the cytoplasm. Under aberrant lysosomal storage conditions, it translocates from the cytoplasm to the nucleus

