

For Research Use Only

# TFEB Polyclonal antibody

Catalog Number:13372-1-AP

Featured Product

226 Publications



## Basic Information

### Catalog Number:

13372-1-AP

### Concentration:

800 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG4194

### GenBank Accession Number:

BC032448

### GeneID (NCBI):

7942

### UNIPROT ID:

P19484

### Full Name:

transcription factor EB

### Calculated MW:

476 aa, 53 kDa

### Observed MW:

65-70 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:1000-1:6000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP, Wes Immunoassay

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, monkey, zebrafish, bovine

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

### Positive Controls:

**WB**: A549 cells, Jurkat cells, HeLa cells, human placenta tissue, NIH/3T3 cells, rat brain tissue, HEK-293 cells, Raji cells, C2C12 cells, RAW 264.7 cells, mouse heart tissue, rat heart tissue

**IP**: Raji cells,

**IHC**: human renal cell carcinoma tissue, rat spleen tissue

**IF/ICC**: HeLa cells,

## Background Information

Transcription factor EB(TFEB) is one of the transcription factors that contain a basic HLH-ZIP domain(for DNA binding ) and HLH and ZIP domains( for oligomerization). TFEB specifically recognizes and binds to E-box sequences, which required dimerization with itself or another MiT/TFE family member. It plays a role in T-cell-dependent antibody responses to activated CD4+ T-cells and thymus-dependent humoral immunity once associated with TFE3. It also activates lysosomal gene by binding the CLEAR-box sequence in the regulatory region. It involves in the signal transduction processes required for normal vascularization of the placenta. This is a rabbit polyclonal antibody raised against the full length of human TFEB. The calculated molecular weight of TFEB is 53 kDa, but modified TFEB is about 65-70 kDa (PMID: 12837690). TFEB mainly present in the cytoplasm (PubMed:23434374). Under aberrant lysosomal storage conditions, it translocates from the cytoplasm to the nucleus (PubMed:23434374). Fisetin increases the levels of TFEB localized in nuclei (PMID: 27112200).

## Notable Publications

Author	Pubmed ID	Journal	Application
Bin Li	32950676	Biochim Biophys Acta Mol Basis Dis	WB,IF
Zhiyuan Wu	34575099	Life (Basel)	WB,IF
Di Hu	34489447	Nat Commun	

## Storage

### Storage:

Store at -20°C. Stable for one year after shipment.

### Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

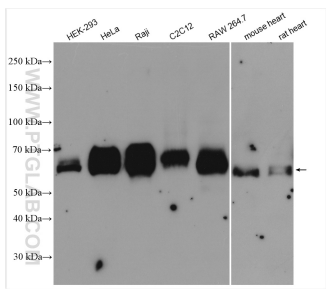
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

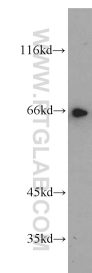
W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

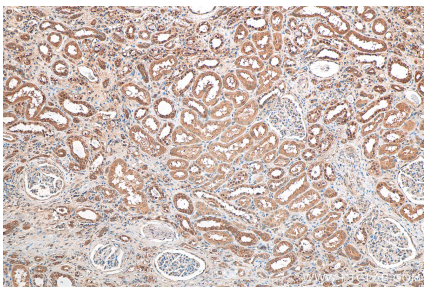
Selected Validation Data



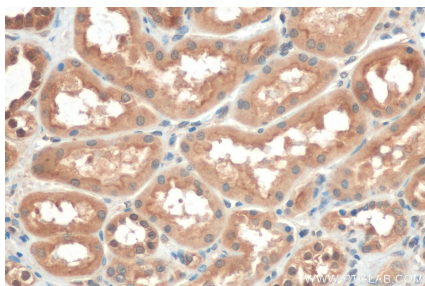
Various lysates were subjected to SDS PAGE followed by western blot with 13372-1-AP (TFEB antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



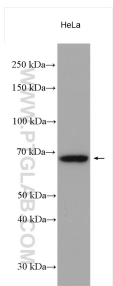
Jurkat cells were subjected to SDS PAGE followed by western blot with 13372-1-AP (TFEB antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



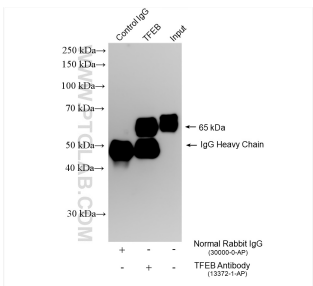
Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 13372-1-AP (TFEB antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



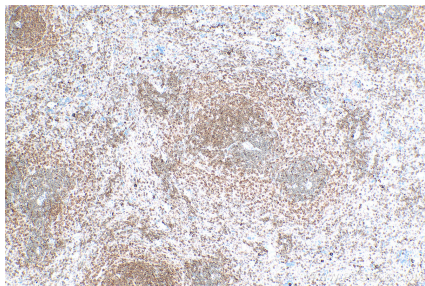
Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 13372-1-AP (TFEB antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



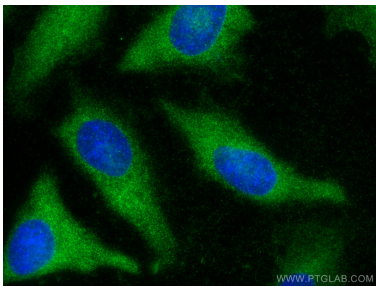
HeLa cells were subjected to SDS PAGE followed by western blot with 13372-1-AP (TFEB antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



IP result of anti-TFEB (IP:13372-1-AP, 4ug; Detection:13372-1-AP 1:10000) with Raji cells lysate 2800 ug.



Immunohistochemical analysis of paraffin-embedded rat spleen tissue slide using 13372-1-AP (TFEB antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Methanol) fixed HeLa cells using TFEB antibody (13372-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).