abcam

Product datasheet

Anti-TFEB antibody ab245349

2 Images

Overview

Product name	Anti-TFEB antibody
Description	Rabbit polyclonal to TFEB
Host species	Rabbit
Tested applications	**Suitable for:** IP, WB
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide within Human TFEB aa 325-375. The exact sequence is proprietary. NP_009093.1 Database link: **P19484**
Positive control	WB: HeLa and HEK-293T whole cell lysate. IP: HeLa whole cell lysate.
General notes	The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7 Preservative: 0.09% Sodium azide Constituent: Tris citrate/phosphate pH 7 to 8
Purity	Immunogen affinity purified
Purification notes	ab245349 was affinity purified using an epitope specific to TFEB immobilized on solid support.
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee   Our **Abpromise guarantee** covers the use of ab245349 in the following tested applications.
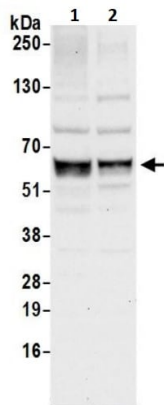
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at 2-10 µg/mg of lysate.
WB		1/2000 - 1/10000. Predicted molecular weight: 53 kDa.

Target

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.

Sequence similarities

Belongs to the MiT/TFE family.
Contains 1 basic helix-loop-helix (bHLH) domain.

Domain

The leucin zipper region is essential for homo- or heterodimerization and high-affinity DNA binding. DNA binding is mediated by the basic region.

Post-translational modifications

Sumoylated; does not affect dimerization with MITF.

Cellular localization

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

Images

Western blot - Anti-TFEB antibody (ab245349)

All lanes : Anti-TFEB antibody (ab245349) at 0.1 µg/ml

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : HEK-293T (Human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell lysate
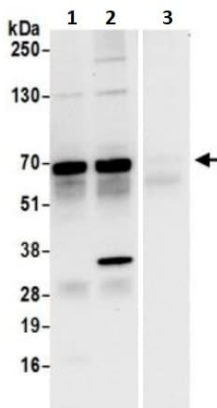
Lysates/proteins at 50 µg per lane.

Developed using the ECL technique.

Predicted band size: 53 kDa

Exposure time: 10 seconds

Prepared using NETN lysis buffer.

Immunoprecipitation - Anti-TFEB antibody (ab245349)

TFEB was immunoprecipitated from HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate (1 mg per IP reaction; 20% of IP loaded) prepared using NETN lysis buffer. ab245349 used for IP at 6 µg per reaction. For WB 1 µg/ml.

Lane 1: ab245349 (Lot 2) IP in HeLa whole cell lysate.

Lane 2: ab245349 (Lot 3) IP in HeLa whole cell lysate.

Lane 3: Control IgG.

Chemiluminescence detection: 10 seconds.

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