abcam

Product datasheet

APC Anti-TFEB antibody [EPR22940-151] ab283612

Recombinant

RabMAb

1 Image

Overview

Product name APC Anti-TFEB antibody [EPR22940-151]

Description APC Rabbit monoclonal [EPR22940-151] to TFEB

Host species Rabbit

Conjugation APC. Ex: 645nm, Em: 660nm

Tested applications Suitable for: Flow Cyt (Intra)

Species reactivity Reacts with: Human

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control Flow Cyt (Intra): Raji cells.

General notes This antibody clone is manuactured by Abcam. If you require a custom buffer formulation or

conjugation for experiments, please contact orders@abcam.com.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

Improved sensitivity and specificity
Long-term security of supply
Animal-free production
For more information <u>see here</u>.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at +4°C. Store

In the Dark.

Storage buffer pH: 7.40

Preservative: 0.02% Sodium azide Constituents: 1% BSA, 98% PBS

Purity Protein A purified

Clonality Monoclonal

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Clone number EPR22940-151

Isotype IgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab283612 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
Flow Cyt (Intra)		1/62500.

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

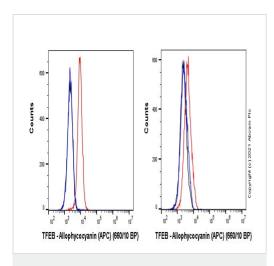
Sumoylated; does not affect dimerization with MITF.

Cellular localization

Cytoplasm. Nucleus. Mainly present in the cytoplasm. Under aberrant lysosomal storage

conditions, it translocates from the cytoplasm to the nucleus.

Images



Flow Cytometry (Intracellular) - APC Anti-TFEB antibody [EPR22940-151] (ab283612)

Flow cytometry overlay histogram showing left Raji positive cells and right negative MCF7 cells stained with ab283612 (red line). The cells were fixed with 80 % methanol (5 min); and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10 % normal goat serum to block non-specific protein-protein interaction followed by the antibody (ab283612) (1x 10^6 in 100 μ l at 0.008 μ g/ml (1/62500 dilution)) for 30 min at 22°C.

Isotype control antibody (black line) was Rabbit IgG (monoclonal) Allophycocyanin (<u>ab232814</u>) used at the same concentration and conditions as the primary antibody. Unlabelled sample (blue line) was also used as a control.

Acquisition of >5000 events were collected using a 40 mW Red laser (638nm) and 660/10 bandpass filter.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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