

### Anti-TFEB antibody [EPR22940-151] ab270604

リコンビナント **RabMAb**

**9 References**    画像数 **10**

#### 製品の概要

製品名	Anti-TFEB antibody [EPR22940-151]
製品の詳細	Rabbit monoclonal [EPR22940-151] to TFEB
由来種	Rabbit
アプリケーション	<b>適用あり:</b> ICC/IF, IP, Flow Cyt (Intra), IHC-P, WB
種交差性	<b>交差種:</b> Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	WB: IM-9 and Raji whole cell lysate. IHC-P: Human lung cancer and colon tissue. ICC/IF: IM-9 and Raji cells. Flow Cyt (intra): IM-9 and Raji cells. IP: Raji whole cell lysate.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### 製品の特性

製品の状態	Liquid
保存方法	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.
バッファー	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR22940-151
アイソタイプ	IgG

## アプリケーション

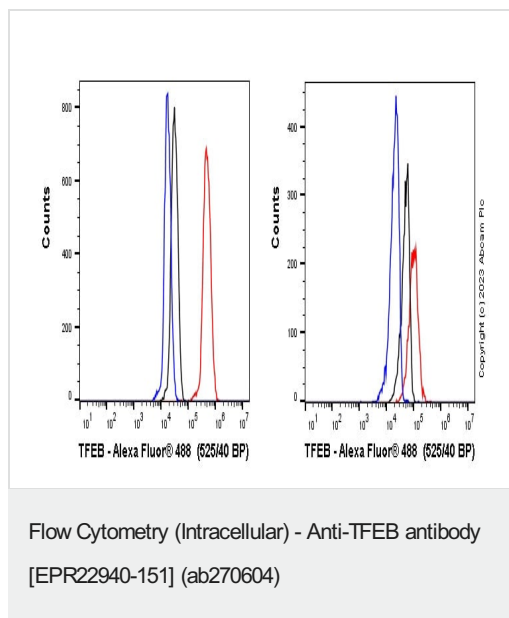
The Abpromise guarantee      Abpromise保証は、 次のテスト済みアプリケーションにおけるab270604の使用に適用されます  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
ICC/IF		1/50.
IP		1/30.
Flow Cyt (Intra)		1/500.
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Detects a band of approximately 66 kDa (predicted molecular weight: 53 kDa).

## ターゲット情報

機能	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.
配列類似性	Belongs to the MiT/TFE family. Contains 1 basic helix-loop-helix (bHLH) domain.
ドメイン	The leucine zipper region is essential for homo- or heterodimerization and high-affinity DNA binding. DNA binding is mediated by the basic region.
翻訳後修飾	Sumoylated; does not affect dimerization with MITF.
細胞内局在	Cytoplasm. Nucleus. Mainly present in the cytoplasm. Under aberrant lysosomal storage conditions, it translocates from the cytoplasm to the nucleus.

## 画像

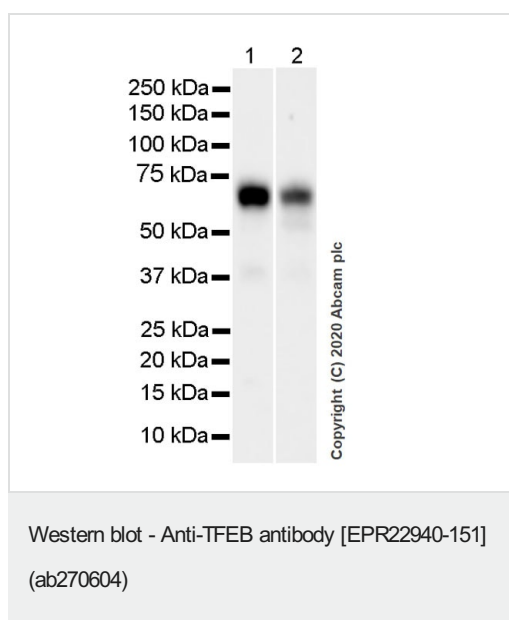


Flow cytometry overlay histogram showing left Raji positive cells and right negative MCF7 stained with ab270604 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilised with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS containing 10µg/ml human IgG and 10% normal goat serum to block FC receptors and non-specific protein-protein interaction followed by the antibody (ab270604) ( $1 \times 10^6$  in 100µl at 0.2µg/ml (1/10350)) for 30min at 22°C.

The secondary antibody Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed was incubated at 1/4000 for 30min at 22°C

Isotype control antibody (black line) was Recombinant Rabbit IgG, monoclonal [EPR25A] - Isotype Control 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 50 mW Blue laser (488nm) and 525/40 bandpass filter.



**All lanes :** Anti-TFEB antibody [EPR22940-151] (ab270604) at 1/1000 dilution

**Lane 1 :** Raji (human Burkitt's lymphoma B lymphocyte), whole cell lysate

**Lane 2 :** IM-9 (human multiple myeloma B Lymphoblast), whole cell lysate

Lysates/proteins at 40 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/20000 dilution

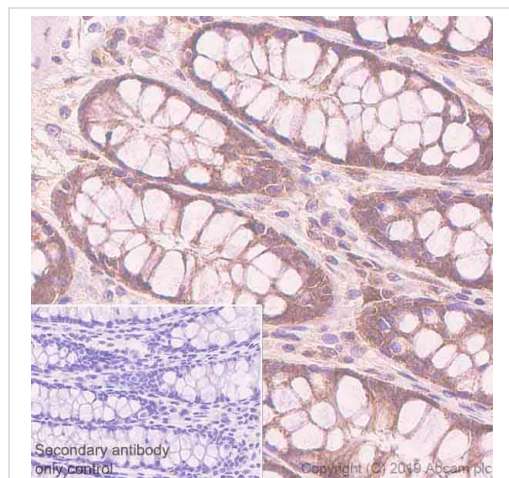
**Predicted band size:** 53 kDa

**Observed band size:** 66 kDa

Blocking and diluting buffer and concentration: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID:30519051).

Exposure time: 26 secs.

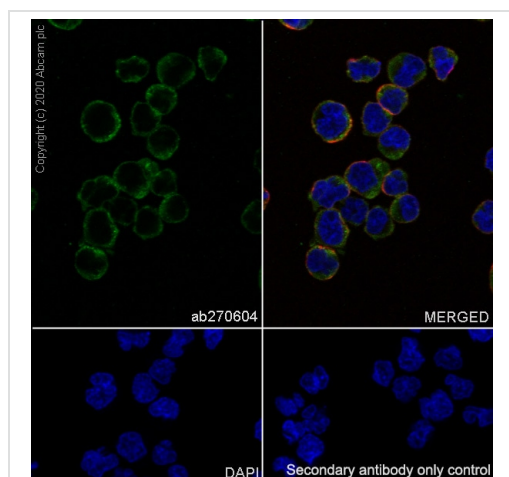


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TFEB antibody [EPR22940-151] (ab270604)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling TFEB with ab270604 at 1/500 followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining in human colon tissue is observed (PMID:30519051). The section was incubated with ab270604 for 20 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

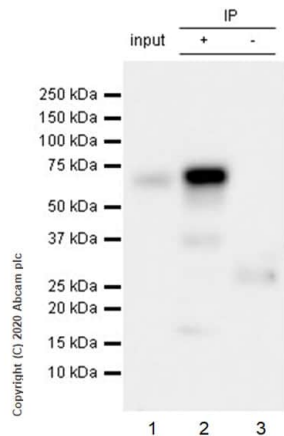
Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.



Immunocytochemistry/ Immunofluorescence - Anti-TFEB antibody [EPR22940-151] (ab270604)

Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Raji cells labeling TFEB with ab270604 at 1/50 dilution, followed by **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in Raji cells. **ab195889** Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is **ab150077** Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.



Immunoprecipitation - Anti-TFEB antibody  
[EPR22940-151] (ab270604)

TFEB was immunoprecipitated from 0.35 mg Raji (human Burkitt's lymphoma B lymphocyte), whole cell lysate with ab270604 at 1/30 dilution (2µg in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab270604 at 1/500 dilution. VeriBlot for IP Detection Reagent (HRP)([ab131366](#)) was used at 1/1000 dilution.

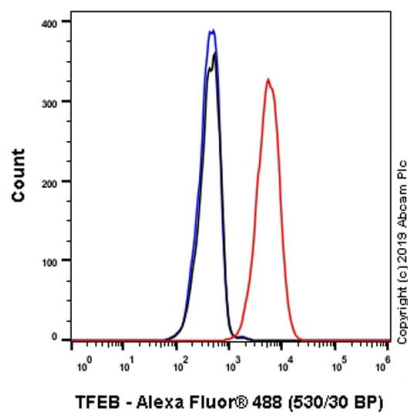
**Lane 1:** Raji whole cell lysate.

**Lane 2:** ab270604 IP in Raji whole cell lysate.

**Lane 3:** Rabbit monoclonal IgG ([ab172730](#)) instead of ab270604 in Raji whole cell lysate.

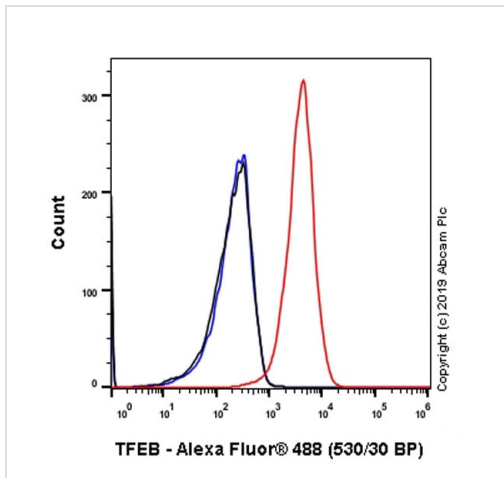
Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 secs.



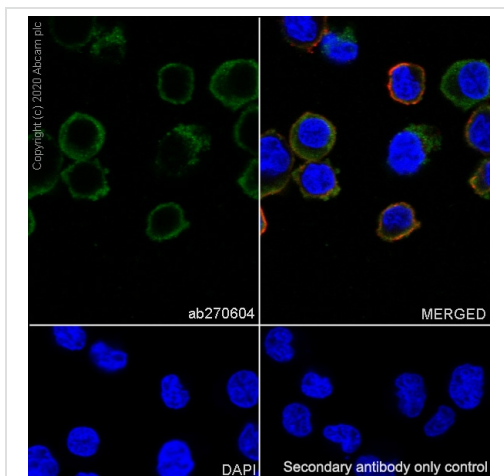
Flow Cytometry (Intracellular) - Anti-TFEB antibody  
[EPR22940-151] (ab270604)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed 90% methanol permeabilized IM-9 (Human multiple myeloma B Lymphoblast) cells labeling TFEB with ab270604 at 1/500 (Red) compared with a Rabbit monoclonal IgG ([ab172730](#)) / Black isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) at 1/2000 dilution was used as the secondary antibody.



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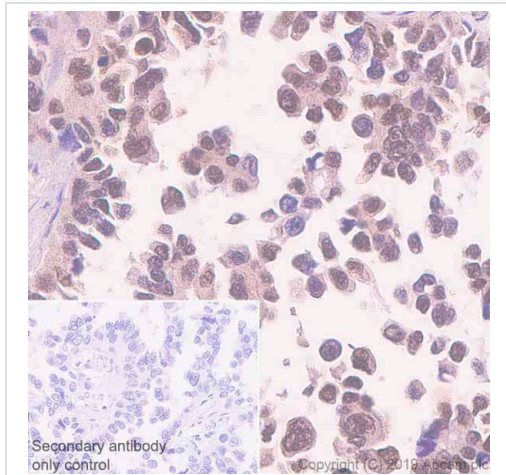
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Immunofluorescent analysis of 4% Paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized IM-9 cells labeling TFEB with ab270604 at 1/50 dilution, followed by [ab150077](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in IM-9 cells. [ab195889](#) Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) was used to counterstain tubulin at 1/200 dilution (Red). The nuclear counterstain was DAPI (Blue).

Secondary antibody only control: Secondary antibody is [ab150077](#) Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) at 1/1000 dilution.







Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TFEB antibody [EPR22940-151] (ab270604)

Immunohistochemical analysis of paraffin-embedded human lung cancer tissue labeling TFEB with ab270604 at 1/500 followed by a ready to use Goat Anti-Rabbit IgG H&L (HRP). Positive staining in human lung cancer tissue is observed (PMID:26264650). The section was incubated with ab270604 for 20 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument Counterstained with hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Goat Anti-Rabbit IgG H&L (HRP).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution2) for 20 mins.

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-TFEB antibody [EPR22940-151] (ab270604)

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