

### Anti-TFEB antibody [EPR22941-6] ab267351

KO 評価済 リコンビナント RabMAb

★★★★★ [1 Abreviews](#) [2 References](#) [画像数 11](#)

#### 製品の概要

|              |   |
|--------------|---|
| 製品名          | Anti-TFEB antibody [EPR22941-6]   |
| 製品の詳細        | Rabbit monoclonal [EPR22941-6] to TFEB  |
| 由来種          | Rabbit  |
| アプリケーション     | <b>適用あり:</b> WB, IP, ICC/IF, IHC-P, Flow Cyt (Intra)  |
| 種交差性         | <b>交差種:</b> Human   |
| 免疫原          | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.  |
| ポジティブ・コントロール | WB: Raji and IM-9 lysates. IHC-P: Human colon, Human lung cancer and Human breast cancer tissues. ICC/IF: Raji and IM-9 cells. Flow Cyt (intra): IM-9 cells. IP: Raji and IM-9 cells.   |
| 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, 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  | EPR22941-6  |
| アイソタイプ | IgG   |

## アプリケーション

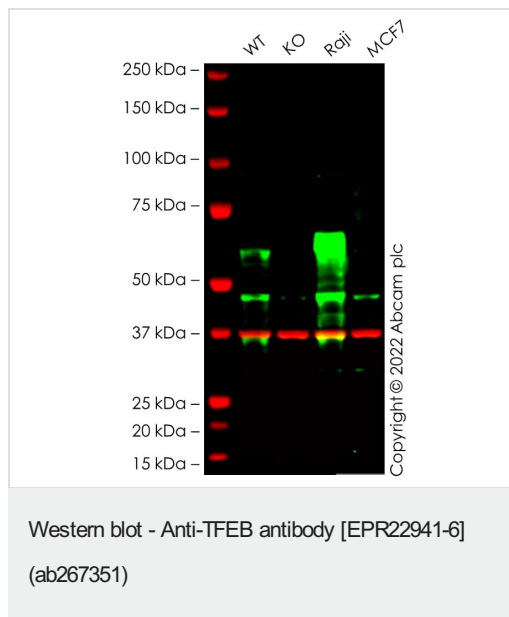
**The Abpromise guarantee**      **Abpromise保証は、**次のテスト済みアプリケーションにおけるab267351の使用に適用されます  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

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

## 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.<br>Contains 1 basic helix-loop-helix (bHLH) domain.   |
| ドメイン  | The leucin 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



**All lanes :** Anti-TFEB antibody [EPR22941-6] (ab267351) at 1/1000 dilution

**Lane 1 :** Wild-type HepG2 cell lysate

**Lane 2 :** TFEB knockout HepG2 cell lysate

**Lane 3 :** Raji cell lysate

**Lane 4 :** MCF7 cell lysate

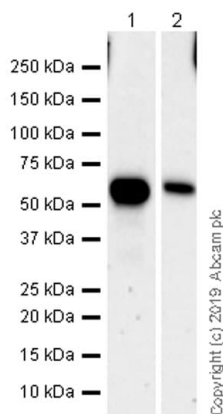
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 53 kDa

**Observed band size:** 60 kDa

False colour image of Western blot: Anti-TFEB antibody [EPR22941-6] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab267351 was shown to bind specifically to TFEB. A band was observed at 60 kDa in wild-type HepG2 cell lysates with no signal observed at this size in TFEB knockout cell line [ab277871](#) (knockout cell lysate [ab284220](#)). To generate this image, wild-type and TFEB knockout HepG2 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween<sup>®</sup> 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Western blot - Anti-TFEB antibody [EPR22941-6] (ab267351)

**All lanes :** Anti-TFEB antibody [EPR22941-6] (ab267351) 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 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/50000 dilution

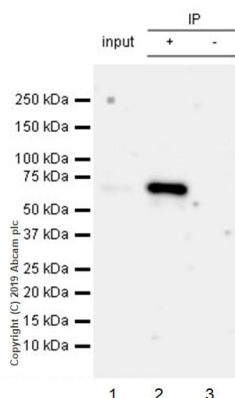
**Predicted band size:** 53 kDa

**Observed band size:** 66 kDa

Blocking and dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

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



Immunoprecipitation - Anti-TFEB antibody [EPR22941-6] (ab267351)

TFEB was immunoprecipitated from 0.35 mg IM-9 (human multiple myeloma B Lymphoblast) whole cell lysate with ab267351 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab267351 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) was used at 1/5000 dilution.

Lane 1: IM-9 (human multiple myeloma B Lymphoblast) whole cell lysate 10ug

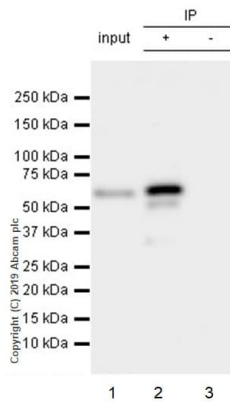
Lane 2: ab267351 IP in IM-9 whole cell lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab267351 in IM-9 whole cell lysate

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

Exposure time: 2 min.

The weak band around 50kDa is one isoform of TFEB(PMID:28993453).



Immunoprecipitation - Anti-TFEB antibody  
[EPR22941-6] (ab267351)

TFEB was immunoprecipitated from 0.35 mg Raji (human Burkitt's lymphoma B lymphocyte) whole cell lysate with ab267351 at 1/30 dilution (2ug in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab267351 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) was used at 1/5000 dilution.

Lane 1: Raji (human Burkitt's lymphoma B lymphocyte) whole cell lysate 10ug

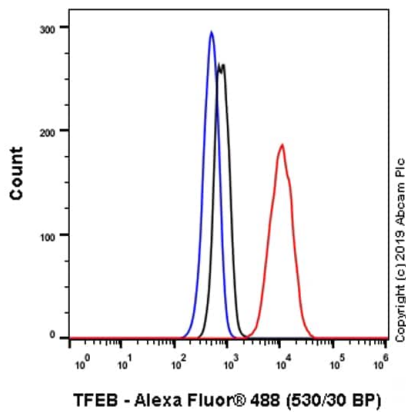
Lane 2: ab267351 IP in Raji whole cell lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab267351 in Raji whole cell lysate

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

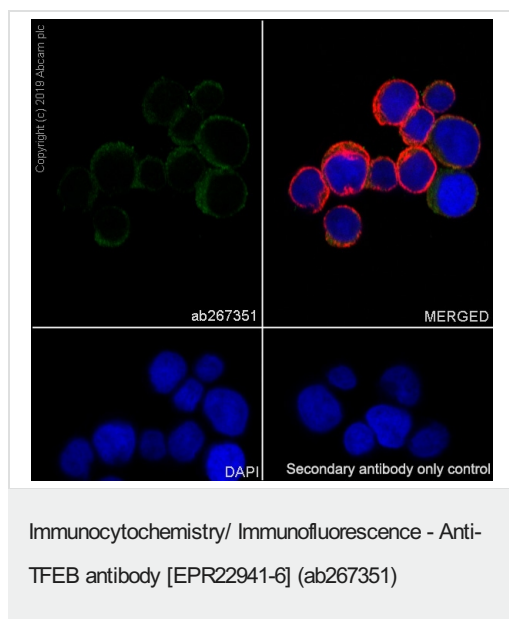
Exposure time: 15 seconds.

The weak band around 50kDa is one isoform of TFEB(PMID:28993453).



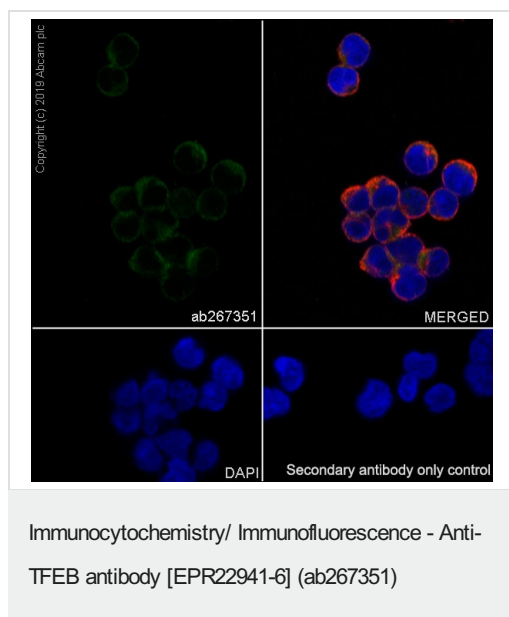
Flow Cytometry (Intracellular) - Anti-TFEB antibody  
[EPR22941-6] (ab267351)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized IM-9 (human multiple myeloma B Lymphoblast) cells labelling TFEB with ab267351 at 1/500 dilution (Red) compared with a Rabbit monoclonal IgG ([ab172730](#)) (Black) isotype control and an unlabelled 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.



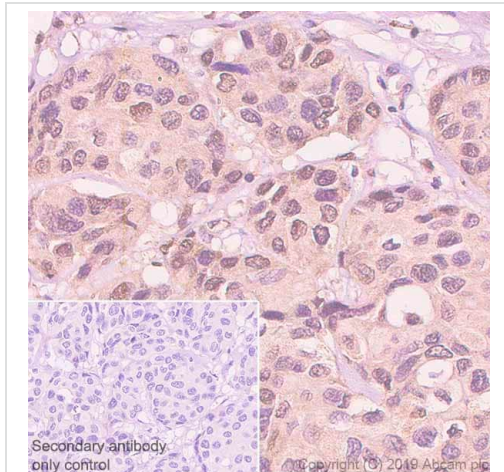
Immunofluorescent analysis of 100% Methanol-fixed IM-9 (human multiple myeloma B Lymphoblast) cells labelling TFEB with ab267351 at 1/50 dilution, followed by [ab150077](#) AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in IM-9 cells. 100% methanol fixation is recommended. [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](#) AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.



Immunofluorescent analysis of 100% Methanol-fixed Raji (human Burkitt's lymphoma B lymphocyte) cells labelling TFEB with ab267351 at 1/50 dilution, followed by [ab150077](#) AlexaFluor®488 Goat anti-Rabbit secondary antibody at 1/1000 dilution (Green). Confocal image showing cytoplasmic staining in Raji cells. 100% methanol fixation is recommended. [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](#) AlexaFluor®488 Goat anti-Rabbit secondary at 1/1000 dilution.

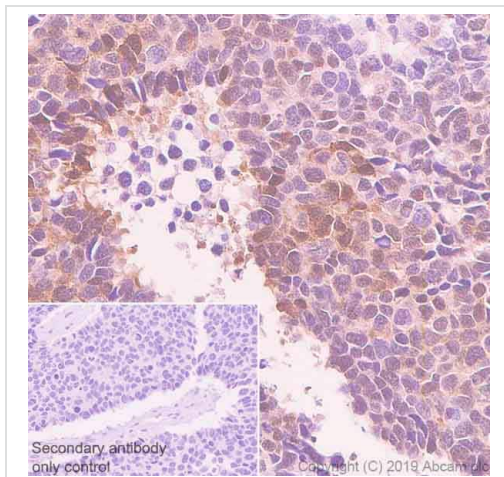


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TFEB antibody [EPR22941-6] (ab267351)

Immunohistochemical analysis of paraffin-embedded Human breast cancer tissue labeling TFEB with ab267351 at 1/500 dilution (1.042ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining in human breast cancer (PMID:28017540). The section was incubated with **ab256492** for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup>RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.



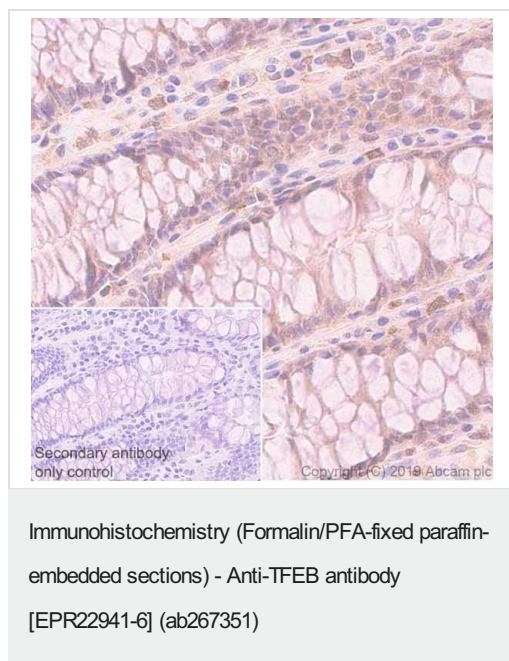
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-TFEB antibody [EPR22941-6] (ab267351)

Immunohistochemical analysis of paraffin-embedded Human lung cancer tissue labeling TFEB with ab267351 at 1/500 dilution (1.042ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining in human lung cancer (PMID: 26264650) The section was incubated with **ab256492** for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup>RX instrument. Counterstained with Hematoxylin.

Secondary antibody only control: Secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.





Immunohistochemical analysis of paraffin-embedded Human colon tissue labeling TFEB with ab267351 at 1/500 dilution (1.042ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining human colon (PMID:30519051). The section was incubated with **ab256492** for 15 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 Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Why choose a recombinant antibody?

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

Anti-TFEB antibody [EPR22941-6] (ab267351)

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