


### Anti-MiTF antibody [D5] ab3201

★★★★☆ **1 Abreviews** **26 References** **画像数 4**

#### 製品の概要

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 製品名          | Anti-MiTF antibody [D5]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 製品の詳細        | Mouse monoclonal [D5] to MiTF                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 由来種          | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| アプリケーション     | <b>適用あり:</b> WB, Flow Cyt (Intra), ICC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 種交差性         | <b>交差種:</b> Human<br><b>交差が予測される動物種:</b> Mouse, Dog  <b>非交差種:</b> Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 免疫原          | Fusion protein. This information is proprietary to Abcam and/or its suppliers.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| エピトープ        | N-terminal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| ポジティブ・コントロール | Flow Cyt (Intra): Malme-3 cells. ICC: Malme-3M cells. WB: HeLa whole cell and nuclear lysate.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 特記事項         | <p>This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or conjugation for your experiments, please contact <a href="mailto:orders@abcam.com">orders@abcam.com</a>.</p> <p>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.</p> <p>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&amp;As</p> |

#### 製品の特性

|       |                                                                                       |
|-------|---------------------------------------------------------------------------------------|
| 製品の状態 | Liquid                                                                                |
| 保存方法  | Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles. |
| バッファー | pH: 7.40<br>Preservative: 0.02% Sodium azide<br>Constituents: PBS, 6.97% L-Arginine   |
| 精製度   | Protein G purified                                                                    |
| ポリ/モノ | モノクローナル                                                                               |
| クローン名 | D5                                                                                    |

|        |       |
|--------|-------|
| アイソタイプ | IgG1  |
| 軽鎖の種類  | kappa |

## アプリケーション

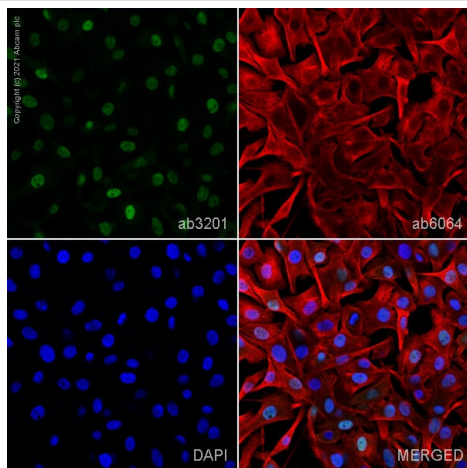
**The Abpromise guarantee** **Abpromise保証は、次のテスト済みアプリケーションにおけるab3201の使用に適用されます**  
 アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

| アプリケーション         | Abreviews | 特記事項                                                                                                                                          |
|------------------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| WB               |           | Use at an assay dependent concentration. Predicted molecular weight: 59 kDa.                                                                  |
| Flow Cyt (Intra) |           | Use 1 µg for 10 <sup>6</sup> cells.<br><b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody. |
| ICC              |           | Use a concentration of 1 µg/ml.                                                                                                               |

## ターゲット情報

|              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>機能</b>    | Transcription factor for tyrosinase and tyrosinase-related protein 1. Binds to a symmetrical DNA sequence (E-boxes) (5'-CACGTG-3') found in the tyrosinase promoter. Plays a critical role in the differentiation of various cell types as neural crest-derived melanocytes, mast cells, osteoclasts and optic cup-derived retinal pigment epithelium.                                                                                                                                                                                                                                                                                                    |
| <b>組織特異性</b> | Isoform M is exclusively expressed in melanocytes and melanoma cells. Isoform A and isoform H are widely expressed in many cell types including melanocytes and retinal pigment epithelium (RPE). Isoform C is expressed in many cell types including RPE but not in melanocyte-lineage cells.                                                                                                                                                                                                                                                                                                                                                            |
| <b>関連疾患</b>  | Defects in MITF are the cause of Waardenburg syndrome type 2A (WS2A) [MIM:193510]. It is a dominant inherited disorder characterized by sensorineural hearing loss and patches of depigmentation. The features show variable expression and penetrance.<br>Defects in MITF are a cause of Waardenburg syndrome type 2 with ocular albinism (WS2-OA) [MIM:103470]. It is an ocular albinism with sensorineural deafness.<br>Defects in MITF are the cause of Tietz syndrome (TIEZS) [MIM:103500]. It is an autosomal dominant disorder characterized by generalized hypopigmentation and profound, congenital, bilateral deafness. Penetrance is complete. |
| <b>配列類似性</b> | Belongs to the MiT/TFE family.<br>Contains 1 basic helix-loop-helix (bHLH) domain.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>翻訳後修飾</b> | Phosphorylation at Ser-405 significantly enhances the ability to bind the tyrosinase promoter.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>細胞内局在</b> | Nucleus.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

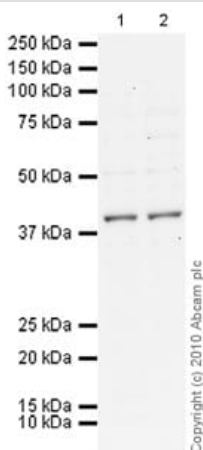
## 画像



Immunocytochemistry - Anti-MiTF antibody [D5] (ab3201)

ab3201 staining MiTF in Malme-3M cells. The cells were fixed with 4% paraformaldehyde (10 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1%PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab3201 at 1µg/ml and **ab6046**, Rabbit polyclonal to beta Tubulin - Loading Control. Cells were then incubated with **ab150117**, Goat polyclonal Secondary Antibody to Mouse IgG H&L (Alexa Fluor® 488) preadsorbed at 1/1000 dilution (shown in green) and **ab150080**, Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Western blot - Anti-MiTF antibody [D5] (ab3201)

**All lanes** : Anti-MiTF antibody [D5] (ab3201) at 5 µg/ml

**Lane 1** : HeLa (Human epithelial carcinoma cell line) whole cell lysate

**Lane 2** : HeLa nuclear lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes** : Goat polyclonal to Mouse IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

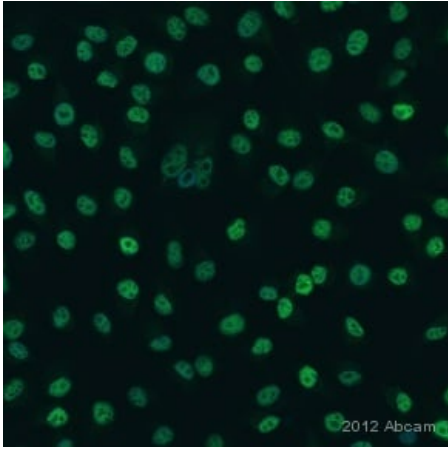
Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 59 kDa

**Observed band size:** 40 kDa

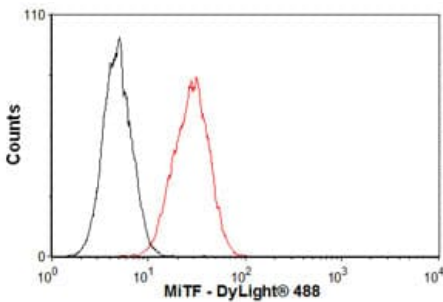
**Exposure time:** 10 minutes



Immunocytochemistry - Anti-MiTF antibody [D5] (ab3201)

This image is courtesy of an anonymous Abreview

ab3201 staining MiTF in the SK-MEL-28 (Human cutaneous melanoma cell line) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with Paraformaldehyde and permeabilized with Triton X-100 0.5% in PBS. Samples were incubated with primary antibody (1/100) for 24 hours at 4°C. An Alexa Fluor<sup>®</sup>488-conjugated Goat anti-mouse IgG polyclonal(1/1000) was used as the secondary antibody. SK-MEL-28 cells was grown on chamber slide. MiTF was found to strictly localised in the nucleus. Cells were counter-stained with DAPI.



Flow Cytometry (Intracellular) - Anti-MiTF antibody [D5] (ab3201)

Overlay histogram showing Malme-3 (Human skin fibroblast cell line) cells stained with ab3201 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab3201, 1µg/1x10<sup>6</sup> cells) for 30 min at 22°C. The secondary antibody used was DyLight<sup>®</sup> 488 goat anti-mouse IgG (H+L) (**ab96879**) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10<sup>6</sup> cells ) used under the same conditions. Acquisition of >5,000 events was performed.

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