abcam

Product datasheet

Anti-MiTF antibody [C5] ab12039

★★★★★ <u>5 Abreviews</u> <u>102 References</u> 3 图像

概述

产**品名称** Anti-MiTF抗体[C5]

描述 小鼠单克隆抗体[C5] to MiTF

宿主 Mouse

经测试应用 适用于: ICC/IF, WB, Flow Cyt (Intra)

种属反应性 与反应: Human

预测可用于: Mouse, Rat, Chicken 🔷

免疫原 Recombinant fragment corresponding to Human MiTF (N terminal).

阳性对照 WB: Malme-3M whole cell lysate. Flow Cyt (Intra): Malme-3M cells. ICC/IF: Malme-3M cells

常规说明

This antibody clone is manufactured by Abcam. If you require a custom buffer formulation or

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

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

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -

80°C. Avoid freeze / thaw cycle.

存储溶液 pH: 7.40

Preservative: 0.02% Sodium azide Constituents: PBS, 6.97% L-Arginine

纯**度** Protein G purified

克隆 单克隆

克隆编号 C5 **同种型** IgG1

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The Abpromise guarantee

Abpromise™承诺保证使用ab12039于以下的经测试应用

"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
ICC/IF	★★★★ (1)	Use at an assay dependent concentration.
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 52-56 kDa (predicted molecular weight: 59 kDa).
Flow Cyt (Intra)		Use $2\mu g$ for 10^6 cells. <u>ab170190</u> - Mouse monoclonal lgG1, is suitable for use as an isotype control with this antibody.

功能

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.

组织特异性

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.

疾病相关

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.

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.

Defects in MITF are the cause of Tietz syndrome (TIETZS) [MIM:103500]. It is an autosomal dominant disorder characterized by generalized hypopigmentation and profound, congenital, bilateral deafness. Penetrance is complete.

序列相似性

Belongs to the MiT/TFE family.

Contains 1 basic helix-loop-helix (bHLH) domain.

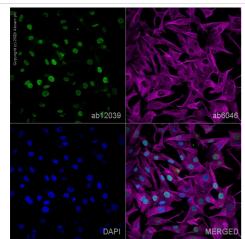
翻译后修饰

Phosphorylation at Ser-405 significantly enhances the ability to bind the tyrosinase promoter.

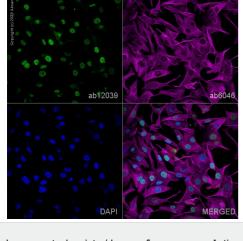
细胞定位

Nucleus.

图片



Immunocytochemistry/ Immunofluorescence - Anti-MiTF antibody [C5] (ab12039)



Anti-MiTF antibody [C5] (ab12039) at 1 µg/ml + Malme 3m (Human melanoma cells) Whole Cell Lysate at 10 μg

Image was acquired with a high-content analyser (Operetta CLS,

Perkin Elmer) and a maximum intensity projection of confocal

ab12039 staining MiTF in Malme-3M cells. The cells were

Tubulin - Loading Control. Cells were then incubated with

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 ab12039 at 5µg/ml and ab6046, Rabbit polyclonal to beta

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 magenta). Nuclear DNA was labelled with DAPI (shown in blue).

250 kDa -150 kDa -100 kDa -75 kDa -50 kDa -37 kDa -25 kDa -20 kDa -15 kDa -

Western blot - Anti-MiTF antibody [C5] (ab12039)

Secondary

sections is shown.

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

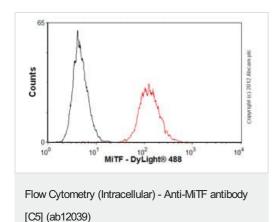
Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 59 kDa

Observed band size: 40,55,70 kDa

Exposure time: 20 minutes



Overlay histogram showing Malme 3m cells stained with ab12039 (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 followed by the antibody (ab12039, 2 μ g/1x10⁶ cells) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-mouse lgG (H+L) (ab96879) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was mouse lgG1 [ICIGG1] (ab91353, 2 μ g/1x10⁶ cells) used under the same conditions. Acquisition of >5,000 events was performed.

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

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