




## Product datasheet

# Anti-MiTF antibody [MITF/915] ab215845

[2 Images](#)

### Overview

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<b>Product name</b>	Anti-MiTF antibody [MITF/915]
<b>Description</b>	Mouse monoclonal [MITF/915] to MiTF
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Dog  <b>Does not react with:</b> Mouse, Rat
<b>Immunogen</b>	Recombinant full length protein corresponding to Human MiTF aa 1 to the C-terminus. NCBI Accession No. 166017. Database link: <a href="#">O75030</a>  <a href="#">Run BLAST with</a>  <a href="#">Run BLAST with</a>
<b>Positive control</b>	IHC: Human melanoma tissue.
<b>General notes</b>	<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>

### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.05% Sodium azide Constituents: 0.05% BSA, 99% PBS
<b>Purity</b>	Protein A/G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	MITF/915
<b>Isotype</b>	IgG1

Light chain type

kappa

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab215845 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
IHC-P		Use a concentration of 1 - 2 µg/ml. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

## Target

### Function

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.

### Tissue specificity

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.

### Involvement in disease

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.

### Sequence similarities

Belongs to the MiT/TFE family.

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

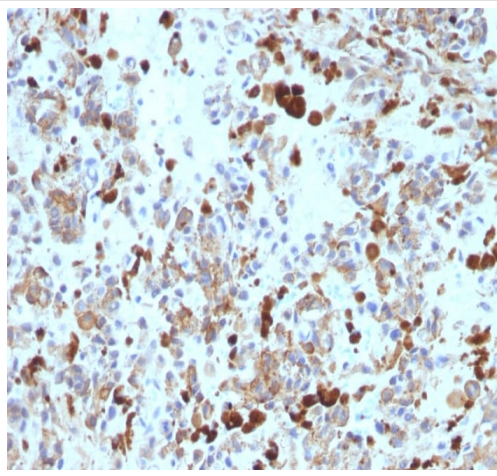
### Post-translational modifications

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

### Cellular localization

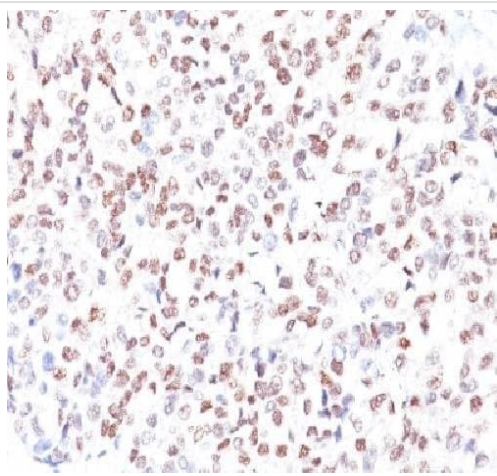
Nucleus.

## Images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MiTF antibody [MITF/915] (ab215845)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human melanoma tissue labelling MiTF with ab215845 at 2µg/ml dilution. Heat mediated antigen retrieval performed with tris/EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MiTF antibody [MITF/915] (ab215845)

Immunohistochemical analysis of formalix-fixed paraffin-embedded Human melanoma tissue, labeling MiTF using ab215845 at 1 µg/mL.

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

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