

Product datasheet

Anti-MiTF antibody [SPM290] - BSA and Azide free ab212610

[1 Image](#)

Overview

| | |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product name | Anti-MiTF antibody [SPM290] - BSA and Azide free |
| Description | Mouse monoclonal [SPM290] to MiTF - BSA and Azide free |
| Host species | Mouse |
| Tested applications | Suitable for: IHC-P |
| Species reactivity | Reacts with: Human Does not react with: Mouse, Rat |
| Immunogen | Recombinant fragment within Human MiTF (N terminal). The exact sequence is proprietary. Database link: O75030 |
| Positive control | Jurkat, A-431, HeLa or 501 Mel Human melanoma cells or Melanoma. |
| General notes | <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&As</p> |

Properties

| | |
|-----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Form | Liquid |
| Storage instructions | 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. |
| Storage buffer | pH: 7.2 Constituent: 100% PBS |
| Carrier free | Yes |
| Purity | Protein G purified |
| Purification notes | ab212610 was purified from Bioreactor Concentrate. |
| Clonality | Monoclonal |
| Clone number | SPM290 |

| | |
|-------------------------|-------|
| Isotype | IgG1 |
| Light chain type | kappa |

Applications

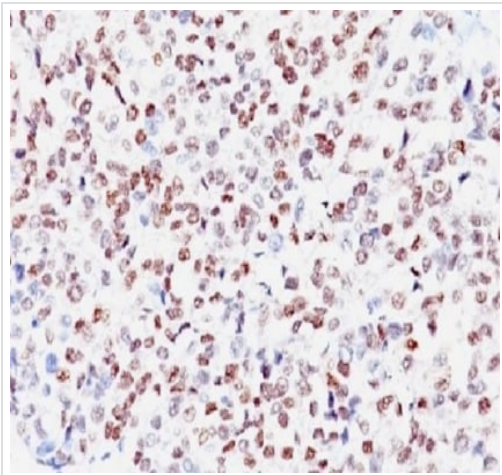
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab212610 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

| Application | Abreviews | Notes |
|-------------|-----------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| IHC-P | | Use a concentration of 0.5 - 1 µg/ml. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. |

Target

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|-----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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



Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human melanoma labeling MiTF with ab212610 at 1 µg/ml.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MiTF antibody [SPM290]
- BSA and Azide free (ab212610)

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

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