abcam

Product datasheet

Anti-MiTF antibody ab209981

2 Images

Overview

Product name	Anti-MiTF antibody
Description	Rabbit polyclonal to MiTF
Host species	Rabbit
Tested applications	**Suitable for:** WB, IHC - Wholemount
Species reactivity	**Reacts with:** Zebrafish
Immunogen	Recombinant fragment within Zebrafish MiTF aa 151-376 (internal sequence). The exact sequence is proprietary. Database link: 30080
Positive control	Zebrafish muscle tissue extract; zebrafish embryos

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. Store undiluted.
Storage buffer	pH: 7.00 Preservative: 0.01% Thimerosal (merthiolate) Constituents: PBS, 20% Glycerol
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

Our Abpromise guarantee covers the use of **ab209981** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

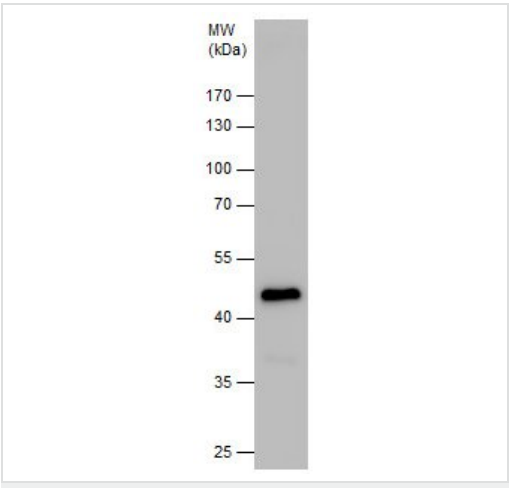
Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 45 kDa.

Application	Abreviews	Notes
IHC - Wholemount		1/100 - 1/500.

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

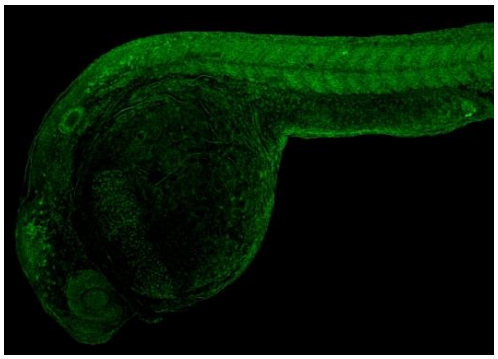


Western blot - Anti-MiTF antibody (ab209981)

Anti-MiTF antibody (ab209981) at 1/1000 dilution + zebrafish muscle tissue extracts at 30 µg

Predicted band size: 45 kDa

10 % SDS-PAGE



IHC - Wholemount - Anti-MiTF antibody (ab209981)

Immunohistochemical analysis of paraformaldehyde-fixed, whole-mount zebrafish embryos labeling MiTF using ab209981 at a 1/200 dilution.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors