

## **MITF Polyclonal Antibody**

Catalog No: YT2769

**Reactivity:** Human; Mouse

**Applications:** WB;IHC;IF;ELISA

Target: MITF

Fields: >>Mitophagy - animal;>>Osteoclast

O75030

Q08874

differentiation;>>Melanogenesis;>>Pathways in cancer;>>Transcriptional

misregulation in cancer;>>Melanoma

Gene Name: MITF

**Protein Name:** Microphthalmia-associated transcription factor

Human Gene Id: 4286

**Human Swiss Prot** 

No:

Mouse Gene Id: 17342

**Mouse Swiss Prot** 

No:

**Immunogen:** The antiserum was produced against synthesized peptide derived from human

MITF. AA range:151-200

**Specificity:** MITF Polyclonal Antibody detects endogenous levels of MITF protein.

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution:** WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not

yet tested in other applications.

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.



Concentration: 1 mg/ml

**Storage Stability:** -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 52kD

**Cell Pathway:** Melanogenesis; Pathways in cancer; Melanoma;

Background: This gene encodes a transcription factor that contains both basic helix-loop-helix

and leucine zipper structural features. It regulates the differentiation and

development of melanocytes retinal pigment epithelium and is also responsible for

pigment cell-specific transcription of the melanogenesis enzyme genes.

Heterozygous mutations in the this gene cause auditory-pigmentary syndromes, such as Waardenburg syndrome type 2 and Tietz syndrome. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by

RefSeq, Jul 2008],

**Function:** alternative products: The X2-type isoforms differ from the X1-type isoforms by

the absence of a 6 residue insert, disease: 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., disease: Defects in MITF are the cause of Tietz syndrome [MIM:103500]. It is an autosomal dominant disorder characterized by generalized hypopigmentation and profound, congenital, bilateral deafness. Penetrance is complete., 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.,function:Transcription factor for tyrosinase and tyrosinase-related protein 1. Binds to a symmetrical DNA sequence (E-boxes) (5'-CACGTG-3') foun

Subcellular Location:

Nucleus . Cytoplasm . Found exclusively in the nucleus upon phosphorylation. .

**Expression:** 

Expressed in melanocytes (at protein level). ; [Isoform A2]: Expressed in the retinal pigment epithelium, brain, and placenta (PubMed:9647758). Expressed in the kidney (PubMed:9647758, PubMed:10578055). ; [Isoform C2]: Expressed in the kidney and retinal pigment epithelium. ; [Isoform H1]: Expressed in the kidney. ; [Isoform H2]: Expressed in melanocytes.

; [Isoform Mdel]: Expressed in melanocytes.

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