

## MiTF (PT0106R) PT® Rabbit mAb

Catalog No: YM8062

**Reactivity:** Human; Mouse; Rat;

**Applications:** WB;IHC;IF;IP;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:

**Specificity:** endogenous

Formulation: PBS, 50% glycerol, 0.05% Proclin 300, 0.05%BSA

**Source :** Monoclonal, rabbit, IgG, Kappa

**Dilution:** IHC 1:200-500,WB 1:1000-5000,IF 1:200-1000,ELISA 1:5000-20000,IP

1:50-200

**Purification:** Protein A

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

Molecularweight: 58kD

1/3



Observed Band: 58kD

**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

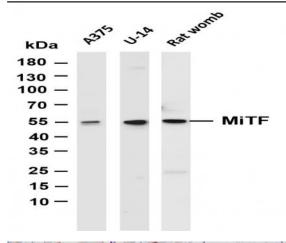
Subcellular Location:

Nuclear

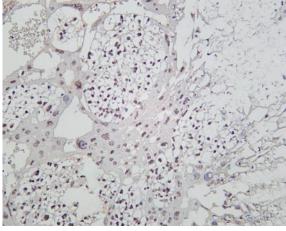
**Expression:** 

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 the kidney. ; [Isoform M1]: Expressed in melanocytes. ; [Isoform Mdel]: Expressed in melanocytes.

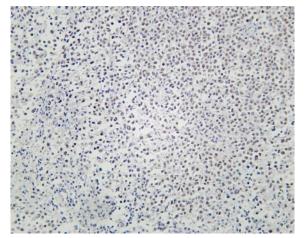
## **Products Images**



Various whole cell lysates were separated by 4-20% SDS-PAGE, and the membrane was blotted with anti-MiTF (PT0106R) antibody. The HRP-conjugated Goat anti-Rabbit IgG(H + L) antibody was used to detect the antibody. Lane 1: A375 Lane 2: U-14 Lane 3: Rat womb Predicted band size: 58kDa Observed band size: 58kDa



Mouse placenta was stained with Anti-MiTF (PT0106R) rabbit antibody



Human melanoma was stained with Anti-MiTF (PT0106R) rabbit antibody