

## MITF Polyclonal Antibody

<b>Catalog No :</b>	YT2769
<b>Reactivity :</b>	Human;Mouse
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	MITF
<b>Fields :</b>	>>Mitophagy - animal;>>Osteoclast differentiation;>>Melanogenesis;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Melanoma
<b>Gene Name :</b>	MITF
<b>Protein Name :</b>	Microphthalmia-associated transcription factor
<b>Human Gene Id :</b>	4286
<b>Human Swiss Prot No :</b>	O75030
<b>Mouse Gene Id :</b>	17342
<b>Mouse Swiss Prot No :</b>	Q08874
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human MITF. AA range:151-200
<b>Specificity :</b>	MITF Polyclonal Antibody detects endogenous levels of MITF protein.
<b>Formulation :</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source :</b>	Polyclonal, Rabbit,IgG
<b>Dilution :</b>	WB 1:500 - 1:2000. IHC 1:100 - 1:300. IF 1:200 - 1:1000. ELISA: 1:10000. Not yet tested in other applications.
<b>Purification :</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

**Concentration :** 1 mg/ml

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

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**Observed Band :** 52kD

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

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**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],

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**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') four

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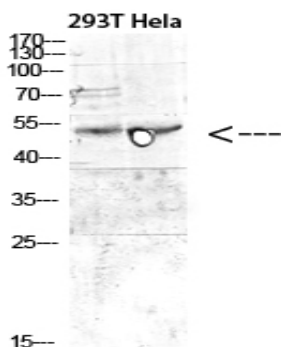
**Subcellular Location :** Nucleus . Cytoplasm . Found exclusively in the nucleus upon phosphorylation. .

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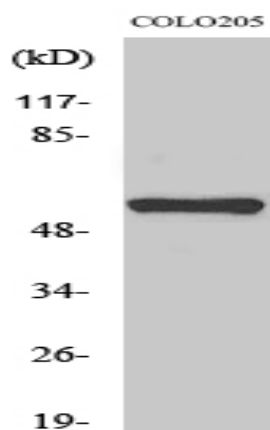
**Expression :** Expressed in melanocytes (at protein level). ; [Isoform A2]: Expressed in the retinal pigment epithelium, brain, and placenta (PubMed:9647758). Expressed in the kidney (PubMed:9647758, PubMed:10578055). ; [Isoform C2]: Expressed in the kidney and retinal pigment epithelium. ; [Isoform H1]: Expressed in the kidney. ; [Isoform H2]: Expressed in the kidney. ; [Isoform M1]: Expressed in melanocytes. ; [Isoform Mdel]: Expressed in melanocytes.

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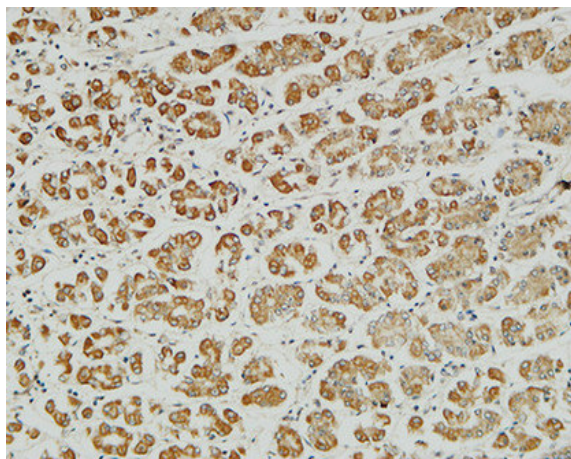
## Products Images



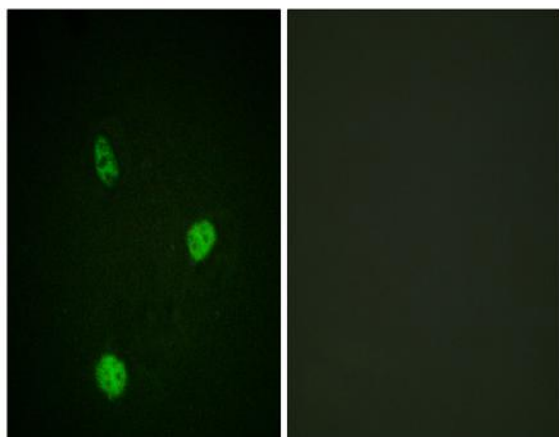
Western Blot analysis of hela cells using primary antibody diluted at 1:500. cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



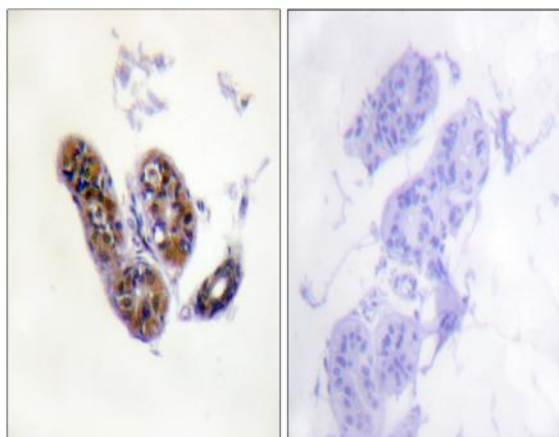
Western Blot analysis of various cells using MITF Polyclonal Antibody diluted at 1:500 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit (SC-003, Inventbiotech, MN, USA).



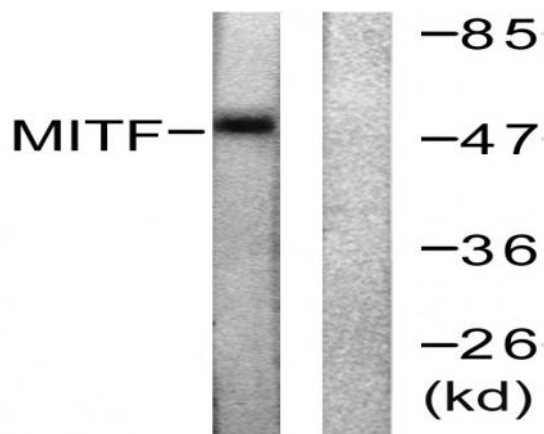
Immunohistochemical analysis of paraffin-embedded Human stomach. 1, Antibody was diluted at 1:200(4° overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 30min).



Immunofluorescence analysis of HeLa cells, using MITF Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human skin tissue, using MITF Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HepG2 cells, using MITF Antibody. The lane on the right is blocked with the synthesized peptide.