



MITF Monoclonal Antibody

Catalog No	YP-mAb-01870
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	MITF
Immunogen	The antiserum was produced against synthesized peptide derived from human MITF. AA range:151-200
Specificity	MITF Monoclonal Antibody detects endogenous levels of MITF protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	bHLHe32;Class E basic helix-loop-helix protein 32;MI;Microphthalmia-associated transcription factor;WS2A;MITF
Observed Band	52kD
Calculated Molecular Weight	52kD
Cell Pathway	Nucleus . Cytoplasm . Found exclusively in the nucleus upon phosphorylation. .
Tissue Specificity	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.
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

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],

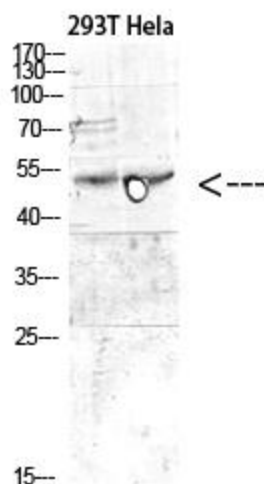
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using MITF Monoclonal Antibody