

## Product datasheet for **TA336406**

### MITF Mouse Monoclonal Antibody [Clone ID: 21D1418]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	21D1418
Applications:	ICC/IF, IHC, WB
Recommended Dilution:	Immunocytochemistry/ Immunofluorescence: 1-5 ug/ml, Immunohistochemistry-Paraffin: 1:200, Immunohistochemistry: 1:200, Western Blot: 0.1 - 1.0 ug/ml
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	A synthetic peptide mapping to the 400-450 a.a. region of accession number O75030.
Formulation:	PBS containing 0.05% BSA, 0.05% Sodium Azide. Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Concentration:	lot specific
Purification:	Protein G purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	melanogenesis associated transcription factor
Database Link:	<a href="#">NP_937821</a> <a href="#">Entrez Gene 17342 Mouse</a> <a href="#">Entrez Gene 25094 Rat</a> <a href="#">Entrez Gene 4286 Human</a> <a href="#">O75030</a>



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**Background:**

Microphthalmia-associated bHLH-LZ transcription factor (Mitf) is a positively acting transcription factor containing a transcription activation domain and a bHLH-LZ domain that mediates DNA-binding and dimerization. Both the transcription activation and bHLH-LZ domains are highly conserved in the closely related TFE3, TFEB and TFEC transcription factors. Mitf can form heterodimers in vitro with the above transcription factors, but not with other bHLH-LZ factors such as Myc, Max or USF. Mitf is expressed as multiple isoforms, which share common transcription activation and DNA-binding domains, but differ in the amino-terminal region. Mitf is targeted by three kinases: GSK-3beta, Map kinase ERK2 and members of the p90 Rsk family of kinases.

**Synonyms:**

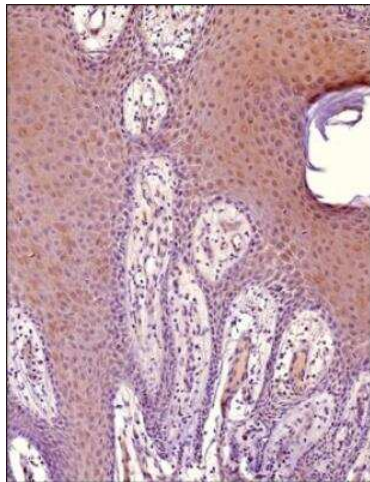
bHLHe32; CMM8; MI; WS2; WS2A

**Protein Families:**

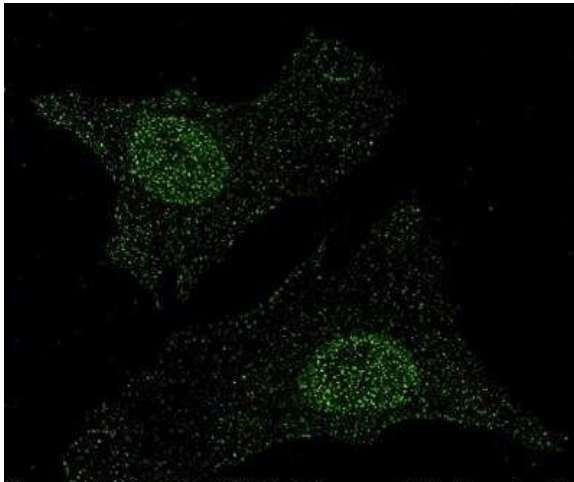
Druggable Genome, Transcription Factors

**Protein Pathways:**

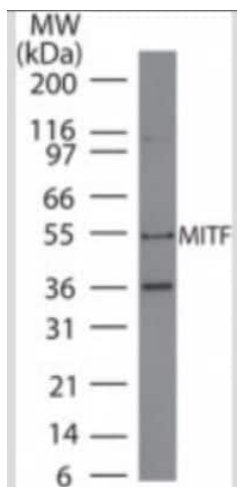
Melanogenesis, Melanoma, Pathways in cancer

**Product images:**

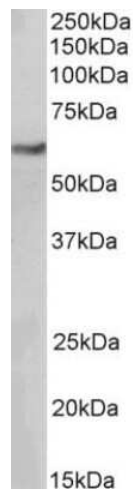
Immunohistochemistry-Paraffin: MITF Antibody (21D1418) TA336406 - Analysis of a FFPE tissue section of human skin using 1:200 dilution of MITF (21D1418) antibody. The staining was developed using HRP labeled anti-mouse secondary antibody and DAB reagent, and nuclei of cells were counter-stained with hematoxylin. General cytoplasmic staining appears enriched in melanocytes below the epidermis. Some nuclear reactivity is observed as well.



Immunocytochemistry/Immunofluorescence: MITF Antibody (21D1418) TA336406 - HeLa cells were fixed in 4% paraformaldehyde for 10 min and permeabilized in 0.5% Triton X-100 in PBS for 5 minutes. The cells were incubated with anti-MITF Antibody (21D1418) TA336406 at 2 ug/ml overnight at 4C and detected with an anti-mouse Dylight 488 (Green) at a 1:500 dilution for 60 minutes. Cells were imaged using a 100X objective and digitally deconvolved.



Western Blot: MITF Antibody (21D1418) TA336406 - Analysis of A375 lysate using MITF antibody at 4 ug/ml.



Western Blot: MITF Antibody (21D1418) TA336406 - Analysis of HeLa lysate (35ug per lane, RIPA buffer) using MITF antibody (TA336406) at 0.1ug/ml. Band detected at ~60kDa. (Expected MW of 58.2kDa according to NP\_937802.1).