

## Microphthalmia Transcription Factor (MITF) Antibody

Mouse Monoclonal Antibody [Clone C5/D5]

Catalog No	Format	Size
4286-MSM1-P0	Purified Ab with BSA and Azide at 200ug/ml	20 ug
4286-MSM1-P1	Purified Ab with BSA and Azide at 200ug/ml	100 ug
4286-MSM1-P1ABX	Purified Ab WITHOUT BSA and Azide at 1.0mg/ml	100 ug

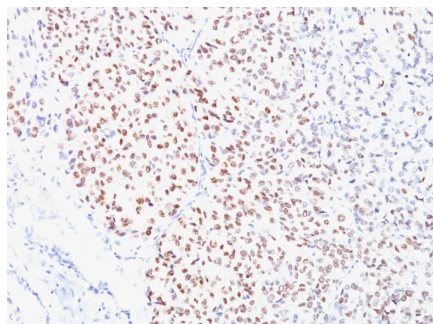
Applications	Tested Dillution	Note
Immunohistochemistry (IHC)	1-2ug/ml	30 min at RT. Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95°C followed by cooling at RT for 20 minutes

### Product Details

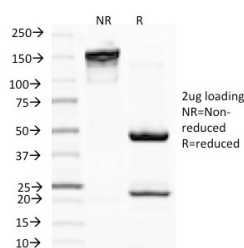
Clone	C5/D5
Gene Name	MITF
Immunogen	NH2 terminus fragment of human Mi protein
Host	Mouse
Clonality	Monoclonal
Isotype / Light Chain	IgG1 / Kappa
Mol. Weight of Antigen	52-56kDa (doublet)
Cellular Localization	Cytoplasm, Nucleus
Species Reactivity	Human
Positive Control	A-431, HeLa or 501 Mel human melanoma cells. Human melanoma., Jurkat

*\*Optimal dilution for a specific application should be determined.*

### Product Images for Microphthalmia Transcription Factor (MITF) Antibody



Formalin-fixed, paraffin-embedded human melanoma stained with MITF Mouse Monoclonal Antibody (C5/D5).



SDS-PAGE Analysis of Purified MITF Mouse Monoclonal Antibody (C5/D5). Confirmation of Integrity and Purity of Antibody.

### **Specificity & Comments**

MITF (microphthalmia transcription factor) is a basic helix-loop-helix-leucine-zipper (bHLH-Zip) transcription factor that regulates the development and survival of melanocytes and retinal pigment epithelium, and also is involved in transcription of pigmentation enzyme genes such as tyrosinase TRP1 and TRP2. MITF has been shown to be phosphorylated by MAP kinase in response to c-kit activation, resulting in upregulation of MITF transcriptional activity. Mutations of the MITF gene are associated with the autosomal dominant hereditary deafness and pigmentation condition, Waardenburg Syndrome type 2A. Multiple isoforms of MITF exist, including MITF-A, MITF-B, MITF-C, MITF-H, and MITF-M, which differ in the amino-terminal domain and in their expression patterns. The MITF-M isoform is restricted to the melanocyte cell lineage. Anti-MITF, D5, recognizes a nuclear protein, which is expressed in the majority of primary and metastatic epithelioid malignant melanomas as well as in normal melanocytes, benign nevi and dysplastic nevi.

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### **Limitations and Warranty**

This antibody is available for research use only and is not approved for use in diagnosis. There are no warranties, expressed or implied, which extend beyond this description. Company is not liable for any personal injury or economic loss resulting from this product.

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### **Supplied As**

200ug/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.

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### **Storage and Stability**

Antibody with azide - store at 2 to 8 °C. Antibody without azide - store at -20 to -80 °C. Antibody is stable for 24 months. Non-hazardous. No MSDS required.

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### **Research Areas**

B Cell Markers, Cardiovascular, Mast Cell Marker, Stem Cell Differentiation

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