

## 36-1434: Monoclonal Antibody to Microphthalmia Transcription Factor (MITF)(Clone : SPM290)

Clonality :	Monoclonal
Clone Name :	SPM290
Application :	IHC
Reactivity :	Human
Gene :	MITF
Gene ID :	4286
Uniprot ID :	075030
Format :	Purified
Alternative Name :	MITF,BHLHE32
Isotype :	Mouse IgG1, kappa
Immunogen Information :	NH2 terminus fragment of human Mi protein

## Description

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.

## **Product Info**

Amount :	100 µg
Purification :	Affinity Chromatography
Content :	100 $\mu g$ in 500 $\mu l$ PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C; stable for 6 months. For long-term storage; store at -20°C. Avoid repeated freeze and thaw cycles.

## **Application Note**

Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes 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&degC followed by cooling at RT for 20 minutes);



Formalin-fixed, paraffin-embedded human Melanoma stained with MITF Monoclonal Antibody (SPM290).

For Research Use Only. Not for use in diagnostic/therapeutics procedures.