

## Anti-MITF Antibody [clone SPM290] (V2713)

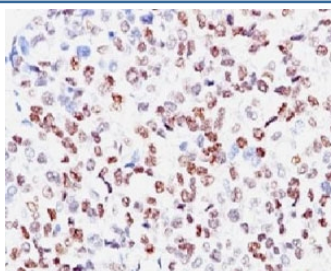
| Catalog No.    | Formulation                                                                                     | Size   |
|----------------|-------------------------------------------------------------------------------------------------|--------|
| V2713-100UG    | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide                      | 100 ug |
| V2713-20UG     | 0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide                      | 20 ug  |
| V2713SAF-100UG | 1 mg/ml in 1X PBS; BSA free, sodium azide free                                                  | 100 ug |
| V2713IHC-7ML   | Prediluted in 1X PBS with 0.1 mg/ml BSA (US sourced) and 0.05% sodium azide; *For IHC use only* | 7 ml   |



Citations (2)

[Bulk quote request](#)

|                    |                                                             |
|--------------------|-------------------------------------------------------------|
| Availability       | 1-3 business days                                           |
| Species Reactivity | Human                                                       |
| Format             | Purified                                                    |
| Clonality          | Monoclonal (mouse origin)                                   |
| Isotype            | Mouse IgG1, kappa                                           |
| Clone Name         | SPM290                                                      |
| Purity             | Protein G affinity chromatography                           |
| UniProt            | O75030                                                      |
| Localization       | Nuclear                                                     |
| Applications       | Immunohistochemistry (FFPE) : 1-2ug/ml for 30 min at RT     |
| Limitations        | This anti-MITF antibody is available for research use only. |



IHC: Formalin-fixed, paraffin-embedded human melanoma stained with anti-MITF antibody (clone SPM290).

## 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, -B, -C, -H, and -M, which differ in the amino-terminal domain and in their expression patterns. The M isoform is restricted to the melanocyte cell lineage.

## Application Notes

Optimal dilution of the anti-MITF antibody should be determined by the researcher.

1. Staining of formalin-fixed tissues requires boiling tissue sections in pH 9 10mM Tris with 1mM EDTA for 10-20 min followed by cooling at RT for 20 minutes
2. The prediluted format is supplied in a dropper bottle and is optimized for use in IHC. After epitope retrieval step (if required), drip mAb solution onto the tissue section and incubate at RT for 30 min.

## Immunogen

An N-terminus fragment of human MITF protein was used as the immunogen for the anti-MITF antibody.

## Storage

Store the anti-MITF antibody at 2-8oC (with azide) or aliquot and store at -20oC or colder (without azide).