

PRODUCT DATA SHEET

Bioworld Technology,Inc.

MITF monoclonal antibody

Catalog: MB66734 Host: Mouse Reactivity: Human, Mouse, Rat

BackGround:

MITF (microphthalmia-associated transcription factor) is a melanocytic nuclear protein that contains basic helix-loop-helix (HLH) and leucine zipper (LZ) domains. These protein motifs are frequently observed in other transcription factors and are particularly common to members of the Myc family. MITF can directly associate with DNA as a homodimer and is required for the development and differentiation of melanocytes. Its expression is upregulated by cAMP and cAMP-dependent pathways. MITF activates several different gene promoters by binding to their E-boxes. Tyrosinase, TRP1 and TRP2 are pigment synthesis genes activated by MITF. When MITF is phosphorylated on Ser73 (via the MAPK pathway), it associates with co-activators of the p300/CBP family and enhances transcription. MITF has several isoforms including MITF-M which is specifically expressed in melanocytes. In MITF-deficient mice there is a complete absence of melanocytes.

Product:

Mouse IgG1 kappa. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.

Molecular Weight:

~ 59 kDa

Swiss-Prot:

O75030

Purification&Purity:

This antibody is purified through a protein G column.

Applications:

WB (1/500 - 1/1000), IHC (1/100 - 1/500)

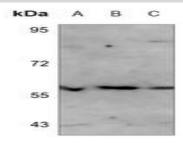
Storage&Stability:

Store at $4\,\mathrm{C}$ short term. Aliquot and store at $-20\,\mathrm{C}$ long term. Avoid freeze-thaw cycles.

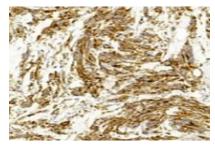
Specificity:

Recognizes endogenous levels of MITF protein.

DATA:



Western blot analysis of MITF expression in A431 (A), PC12 (B), NIH3T3 (C) whole cell lysates.



Immunohistochemical analysis of MITF staining in human melanoma formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Note:

For research use only, not for use in diagnostic procedure.

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