



PROTEIN BIOTECHNOLOGIES

MICROPHthalmia TRANSCRIPTION FACTOR (Mi/MITF; CLONE D5) MOUSE MONOCLONAL ANTIBODY

Catalog Number: PBT-2178

Description: The Microphthalmia transcription factor (~61-64 kDa) is a transcription factor belonging to the basic helix-loop-helix leucine zipper (bHLH-ZIP) family of transcription factors that exists in a dimeric form. Identified in several different species, the protein is called Mi in the mouse and MITF in man. Mi/MITF has several functions including regulation of the development and survival of many cell types. While the primary function of Mi/MITF is transactivation of the genes involved in regulation of melanogenesis, it has also been shown to be required for osteoclast activity. Mi/MITF exists as at least three different isoforms, Mitf-A/MITF-A, Mitf-H/MITF-H, Mitf-M/MITF-M that vary in tissue expression, as splice variants, and undergoes variable phosphorylation in a MAPK regulated fashion. Mi/MITF has been shown to associate with several protein partners including CBP/p300, c-fos and PU-1 forming cytoplasmic complexes that are subsequently translocated to the nucleus. The association with p300 is regulated in a phospho-specific manner making Mi/MITF one of only two proteins to be so regulated. Mutations in MITF have been associated with Waardenburg-Syndrome Type 2.

Size: 100 ug
The vial is provided with a 10% overfill. Maximum recovery can be obtained by centrifuging the vial briefly to collect any solution on the cap and tube sides.

Species Cross-Reactivity: Human. Not mouse or rat.

Application/Dilutions:

FFPE:	1.0-5.0 ug/ml
Immunofluorescence:	1.0-2.5 ug/ml
Immunoprecipitation:	1.0 ug/sample
Western blot:	1.0 ug/ml

Source: Balb/c mice were immunized with recombinant human Mi/MITF protein and fusing the splenocytes with P3-X63-Ag8-653 mouse myeloma cells.

Form/Storage: Purified IgG₁ with 50% glycerol, 0.01% sodium azide and 1.0 mg/ml BSA. Store at -20° C. Avoid multiple freeze/thaw cycles.

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