MITF antibody (mAb)

Catalog Nos: 39789, 39790

RRID: AB_2614955
Clone: C5.D5
Isotype: IgG1
Application(s): ChIP, ChIP-Seq, EMSA, ICC, IF, IP, WB
Reactivity: Human

Quantities: 100 µg, 10 µg
Purification: Protein G Chromatography
Host: Mouse
Concentration: 1 µg/µl
Molecular Weight: 52-56 kDa

Background: MITF protein (Microphthalmia-associated Transcription Factor) is a basic helix-loop-helix type transcription factor involved in the differentiation and development of retinal pigment epithelium and melanocytes. It is also responsible for pigment cell-specific transcription of the melanogenesis enzyme genes tyrosinase and tyrosinase related protein 1. For activity MITF needs to heterodimerize with other bHLH proteins such as TFE3, TFEB or TFE. Defects in MITF are the cause of Waardenburg syndrome type 2A and Tietz syndrome.

Immunogen: This MITF antibody was raised against an N-terminal fragment of human MITF.

Buffer: Purified IgG in 70 mM Tris (pH 8), 105 mM NaCl, 31 mM glycine, 0.07 mM EDTA, 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:
Applications Validated by Active Motif:
ChIP: 2.5 - 10 µg per ChIP
ChIP-Seq: 4 µg each

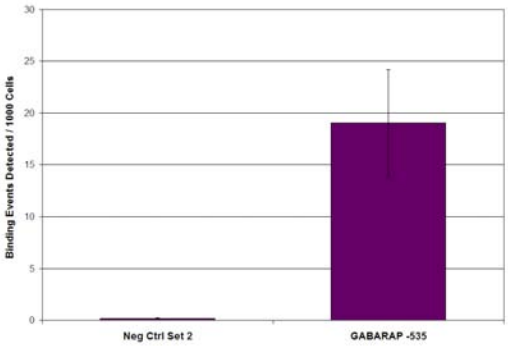
This antibody is also available as an AbFlex® engineered recombinant antibody. For details on the corresponding AbFlex Recombinant Antibody, see Catalog No. 91201.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by aliquoting items into single-use fractions for storage at -20°C for up to 2 years. Keep all reagents on ice when not in storage. This product is guaranteed for 12 months from date of receipt.

This product is for research use only and is not for use in diagnostic procedures.

MITF antibody (mAb) tested by ChIP-Seq.

(ChIP) was performed using the ChIP-IT® High Sensitivity Kit (Cat. No. 53040) and chromatin from a human melanoma cell line (2.5 million cells). ChIP DNA was sequenced on the Illumina GA II and 19 million sequence tags were mapped to identify MITF binding sites across the genome. The image shows hundreds of MITF binding sites across a 60 million bp region on chromosome 9.



MITF antibody (mAb) tested by ChIP.

Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT® High Sensitivity Kit (Cat. No. 53040) with 30 µg of chromatin from human lung melanoma cell line MALME-3M and 4 µg of MITF antibody. ChIP DNA was used in qPCR with the control primer pairs or gene-specific primer pairs as indicated. Data are presented as Binding Events Detected per 1000 Cells using Active Motif's Epigenetic Services normalization scheme which accounts for primer efficiency and the amount of chromatin used in the ChIP reaction.