

AbFlex® MITF antibody (rAb)

Catalog Nos: 91201, 91202**RRID:** AB_2793801**Isotype:** IgG2a**Application(s):** ChIP-Seq**Reactivity:** Human**Quantities:** 100 µg, 10 µg**Purification:** Protein A**Host:** Mouse**Concentration:** 1 µg/µl**Molecular Weight:** 52 - 56 kDa

Background: AbFlex® antibodies are recombinant antibodies (rAbs) that have been generated using defined DNA sequences to produce highly specific, reproducible antibodies. Each AbFlex antibody contains a 6xHis Tag, a Biotinylation Tag for enzymatic biotin conjugation using the biotin ligase, BirA, and a sortase recognition motif (LPXTG) to attach a variety of labels directly to the antibody including fluorophores, enzymatic substrates (HRP, AP), peptides, drugs as well as solid supports. AbFlex® MITF antibody was expressed as full-length IgG with mouse immunoglobulin heavy and light chains (IgG2a isotype) in mammalian 293 cells.

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 antibody was raised against an N-terminal fragment of human MITF (Microphthalmia Transcription Factor).

Buffer: Purified IgG in 140 mM Hepes, pH 7.5, 70 mM NaCl, 32 mM NaOAc, 0.035% sodium azide, 30% glycerol. Sodium azide is highly toxic.

Application Notes:

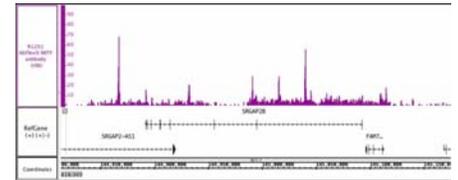
Applications Validated by Active Motif:

ChIP-Seq: 4 µg per ChIP

AbFlex® recombinant antibodies are genetically derived from DNA sequences of parental hybridoma clones. For details on the parental clone, see Catalog No. 39789.

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.

**AbFlex® MITF antibody (rAb) tested by ChIP-Seq.**

Chromatin immunoprecipitation (ChIP) was performed using the ChIP-IT® High Sensitivity Kit (Cat. No. 53040) with 30 µg of chromatin from SK-MEL-30 human melanoma cells and 4 µg MITF antibody. ChIP DNA was sequenced on the Illumina HiSeq and 9.1 million sequence tags were mapped to identify MITF binding sites.