

Mouse Anti-MiTF (Microphthalmia Transcription Factor) [MITF/915]: MC0854, MC0854RTU7

Intended Use: For Research Use Only

Description: Highly MiTF is a basic helix-loop-helix-leucine zipper (b-HLH-ZIP) transcription factor implicated in pigmentation, mast cells and bone development. The mutation of Mi causes Waardenburg Syndrome type II in humans. In mice, a profound loss of pigmented cells in the skin eye and inner ear results, as well as osteopetrosis and defects in natural killer and mast cells. There are two known isoforms of MiTF differing by 66 amino acids at the NH2 terminus. Shorter forms are expressed in melanocytes and run as two bands at 52kDa and 56kDa, while the longer Mi form runs as a cluster of bands at 60-70kDa in osteoclasts and in B16 melanoma cells (but not other melanoma cell lines), as well as mast cells and heart. Clone D5 cocktail is especially designed for sensitive detection of MiTF protein. C5 reacts with both melanocytic and non-melanocytic isoforms of MiTF.

Specifications

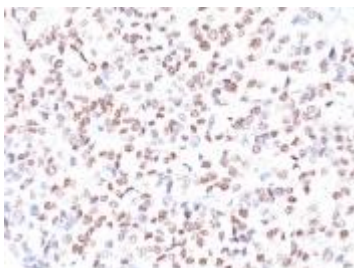
Clone: MITF/915
Source: Mouse
Reactivity: Human, dog
Isotype: IgG1k
Localization: Nucleus
Formulation: Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN₃)
Storage: Store at 2°- 8°C
Applications: IHC, Flow Cyt., IF
Package:

| Description | Catalog No. | Size |
|---|-------------|------|
| MiTF (Microphthalmia Transcription Factor) Concentrated | MC0854 | 1 ml |
| MiTF (Microphthalmia Transcription Factor) Prediluted | MC0854RTU7 | 7 ml |

IHC Procedure*

Positive Control Tissue: Melanoma
Concentrated Dilution: 50-200
Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp: 30-60 minutes @ RT
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human melanoma stained with MITF using DAB

References:

1. AMPK activation promotes lipid droplet dispersion on deetyrosinated microtubules to increase mitochondrial fatty acid oxidation. Herms A, et al. Nat Commun 6:7176, 2015.
2. a2-Chimaerin regulates a key axon guidance transition during development of the oculomotor projection. Clark C, et al. J Neurosci 33:16540-51, 2013.
3. Multiparametric analysis of CLASP-interacting protein functions during interphase microtubule dynamics. Long JB, et al. Mol Cell Biol 33:1528-45, 2013.

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Rev. A