

Anti-Mitf antibody, rabbit serum, ChIP grade

73-107, 100 ul

Mitf (Microphthalmia-associated transcription factor) is a transcription factor that contains both basic helix-loop-helix and leucine zipper structural features. It plays a critical role in the differentiation of various cell types such as neural crest-derived melanocytes, mast cells, osteoclasts and optic cup-derived retinal pigment epithelium. Mutations in **Mitf** cause auditory-pigmentary syndromes, such as Waardenburg syndrome type 2 and Tietz syndrome. Mitf consists of many isoforms that differ in their N-terminal sequences owing to different promoter choices and/or in their internal sequences caused by alternative splicing.

Applications:

1. Western blotting (1/5,000: Different splicing isoforms detected).
2. Immunohistochemistry (dilution: 1/500 ~ 1/1,000)
3. Immunocytochemistry
4. ChIP (chromatin immunoprecipitation) (1/200: Users should examine the best conditions which depend on samples and the ways of extract preparation)

Immunogen: Recombinant human Mitf protein with His tag

Specificity: Reactive with human, mouse, chicken and Xenopus Mitf. Especially it works well with the eye

Form: Antiserum added with 0.05% sodium azide

Storage: Shipped at 4°C and stored at -20°C

Data Link: UniProtKB/Swiss-Prot human: [O75030](#) (MITF_HUMAN), mouse: [Q08874](#) (MITF_MOUSE), chicken: [O73871](#) (O73871_CHICK), Xenopus: [A4IID0](#) (A4IID0_XENTR), OMIM (human): [156845](#)

References: This antibody was used in the following references.

1. Tsukiji N *et al* "Mitf functions as an in ovo regulator for cell differentiation and proliferation during development of the chick RPE" *Dev Biol* **326**: 335-346 (2009) PMID: [19100253](#)
2. Delmas V *et al* "beta-Catenin induces immortalization of melanocytes by suppressing p16INK4a expression and cooperates with N-Ras in melanoma development" *Genes Dev* **21**: 2923-2935 (2007) PMID: [18006687](#)
3. Osawa M *et al* "Molecular characterization of melanocyte stem cells in their niche" *Development* **132**: 5589-5599 (2005) PMID: [16314490](#)

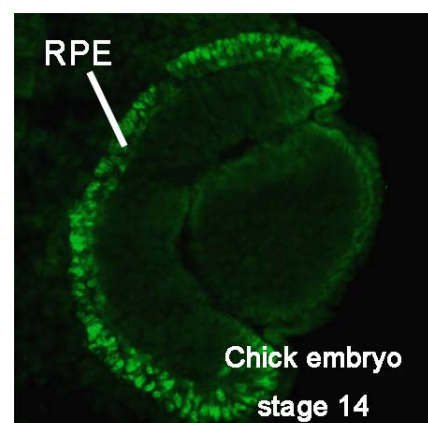


Fig. 1 Mitf expression in the developing eye.

At stage 14, Mitf protein is detected throughout the RPE (Retinal Pigment Epithelium).