

## Product datasheet for AP06536PU-M

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OriGene Technologies, Inc.

## **MITF Rabbit Polyclonal Antibody**

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** IF, IHC, WB

Recommended Dilution: Western blot: 1/500-1/1000.

Immunofluorescence: 1/50-1/200.

**Immunohistochemistry on Paraffin Sections:** 1/50-1/200.

Reactivity: Human, Mouse

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Synthetic peptide, corresponding to amino acids 141-190 of Human MITF.

**Specificity:** This antibody detects endogenous levels of MEK1 protein.

(region surrounding Gly174)

**Formulation:** Phosphate buffered saline (PBS), pH~7.2

State: Aff - Purified

State: Liquid purified Ig fraction (> 95% pure by SDS-PAGE).

Preservative: 0.05% Sodium Azide

Concentration: 1.0 mg/ml

**Purification:** Affinity Chromatography using epitope-specific immunogen.

**Conjugation:** Unconjugated

**Storage:** Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

**Predicted Protein Size:** ~ 52 kDa

**Gene Name:** melanogenesis associated transcription factor

Database Link: Entrez Gene 4286 Human

<u>O75030</u>





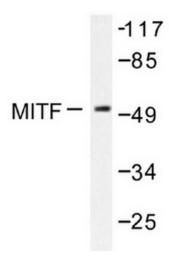
Background:

MITF (microphthalmia-associated transcription factor) is a melanocytic nuclear protein that contains basic helix-loop-helix (HLH) and leucine zipper (LZ) domains. These protein motifs are frequently observed in other transcription factors and are particularly common to members of the Myc family. MITF can directly associate with DNA as a homodimer. It is required for the development and differentiation of melanocytes. Its expression is upregulated by cAMP and cAMP dependent pathways. MITF activates several different gene promoters by binding to their E-boxes. Tyrosinase, TRP-1 and TRP-2 are pigment synthesis genes activated by MITF. When MITF is phosphorylated on Serine 73 (via the MAPK pathway), it associates with coactivators of the p300/CBP family and enhances transcription. MITF has several isoforms including MITF-M which is specifically expressed in melanocytes. In Mitfdeficient mice there is a complete absence of melanocytes.

Synonyms:

Microphthalmia-associated transcription factor, Mi-protein

## **Product images:**



Western blot analysis of MITF antibody in extracts from COS7 cells.