



Product Datasheet

Product Name	Microphthalmia Human Recombinant
Cata No	CB501131
Source	<i>Escherichia Coli.</i>
Synonyms	Microphthalmia-associated transcription factor, MITF, MI, WS2A, bHLHe32.

Description

MITF is a basic helix-loop-helix-leucin zipper (b-HLH-ZIP) transcription factor implicated in pigmentation, mast cells and bone development. The mutation of MITF causes Waardenburg Syndrome type II and Tietz syndrome 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 MITF 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. MITF Human Recombinant (aa 170-279) expressed in E.coli, shows a 38 kDa band on SDS-PAGE. The MITF is purified by proprietary chromatographic techniques.

Physical Appearance

Sterile Filtered clear solution.

Formulation

MITF in 50mM Tris-Acetate, pH7.5, 1mM EDTA and 20% Glycerol.

Stability

Store vial at -20°C to -80°C. When stored at the recommended temperature, this protein is stable for 12 months.

Please prevent freeze-thaw cycles.

Applications

- ELISA
- Inhibition Assays
- Western Blotting