Recombinant Human Microphthalmia-associated Transcription Factor

Cat. No. MITF-161H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human MITF protein expressed in*E.coli*encodes amino acids 170-279 and has a molecular mass of 38 kDa.
Species	Human
Source	E.coli
ProteinLength	170-279 a.a.
Description	Mi. is a basic helix-loop-helix-leucin zipper (b-HLH-ZIP) transtripotion 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 Mi 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 melonoma cells (but not other melanoma cell lines), as well as mast cells and heart.
Formulation	Recombinant Human MITF protein at 100μg/ml in 50mM Tris-Acetate, pH7.5, 1mM EDTA and 20% Glycerol.
Application And Suggested Dilutions	•ELISA •Inhibition Assays •Western Blotting

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Characterization	On SDS-PAGE commassie blue stained gel, the purified recombinant protein shows a band at 38 kDa.
Storage & Stability	Store vial at -20℃to -80℃. When stored at the recommended temperature, this protein is stable for 12 months.

GENE INFORMATION

Gene Name	MITF microphthalmia-associated transcription factor [Homo sapiens]
Synonyms	MITF; microphthalmia-associated transcription factor; MI; WS2A; bHLHe32; homolog of mouse microphthalmia; MI; OTTHUMP00000195123; OTTHUMP00000195140
Gene ID	4286
mRNA Refseq	NM_000248
Protein Refseq	NP_000239
MIM	156845
UniProt ID	O75030
Chromosome Location	3p14.1-p12.3
Pathway	Melanogenesis; Melanoma; Pathways in cancer
Function	RNA polymerase II transcription factor activity, enhancer binding; chromatin binding; transcription activator activity; transcription activator activity

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