



Human MITF blocking peptide (DAG-P1789)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	This gene encodes a transcription factor that contains both basic helix-loop-helix and leucine zipper structural features. It regulates the differentiation and development of melanocytes and retinal pigment epithelium and is also responsible for pigment cell-specific transcription of the melanogenesis enzyme genes. Heterozygous mutations in this gene cause auditory-pigmentary syndromes, such as Waardenburg syndrome type 2 and Tietz syndrome. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]
Specificity	Isoform M is exclusively expressed in melanocytes and melanoma cells. Isoform A and isoform H are widely expressed in many cell types including melanocytes and retinal pigment epithelium (RPE). Isoform C is expressed in many cell types including RPE but not melanoma cells.
Conjugate	Unconjugated
Applications	BL
Sequence Similarities	Belongs to the MiT/TFE family. Contains 1 basic helix-loop-helix (bHLH) domain.
Format	Liquid
Preservative	None
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles. Information available upon request.

GENE INFORMATION

Gene Name	MITF microphthalmia-associated transcription factor [Homo sapiens (human)]
Official Symbol	MITF

Synonyms	MITF; microphthalmia-associated transcription factor; MI; WS2; CMM8; WS2A; bHLHe32; class E basic helix-loop-helix protein 32;
Entrez Gene ID	4286
mRNA Refseq	NM_000248.3
Protein Refseq	NP_000239.1
UniProt ID	O75030
Chromosome Location	3p14.2-p14.1
Pathway	IL6-mediated signaling events, organism-specific biosystem; Kit Receptor Signaling Pathway, organism-specific biosystem; Melanogenesis, organism-specific biosystem; Melanogenesis, conserved biosystem; Melanoma, organism-specific biosystem; Melanoma, conserved biosystem; Neural Crest Differentiation, organism-specific biosystem; Osteoclast differentiation, organism-specific biosystem; Osteoclast differentiation, conserved biosystem; Pathways in cancer, organism-specific biosystem; RANKL/RANK Sign
Function	DNA binding; RNA polymerase II core promoter proximal region sequence-specific DNA binding transcription factor activity involved in positive regulation of transcription; RNA polymerase II distal enhancer sequence-specific DNA binding transcription factor
