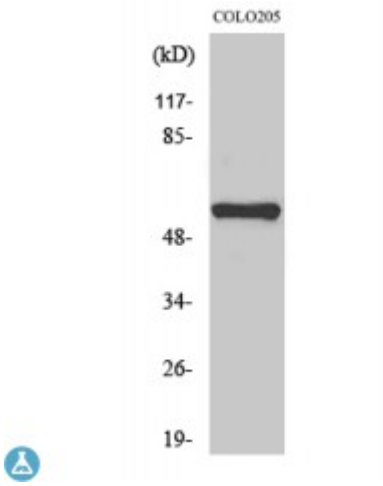
Anti-MITF antibody



Description	Rabbit polyclonal to MITF.

Model	STJ94134
Host	Rabbit
Reactivity	Human, Mouse
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human MITF around the non-phosphorylation site of S180.
Immunogen Region	120-200 aa
Gene ID	4286
Gene Symbol	MITF
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:10000
Specificity	MITF Polyclonal Antibody detects endogenous levels of MITF protein.
Tissue 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 in melanocyte-lineage cells. Isoform Mdel is widely expressed in melanocytes, melanoma cell lines and tissues, but almost undetectable in non-melanoma cell lines.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).

Protein Name	Microphthalmia-associated transcription factor Class E basic helix-loop-helix protein 32 bHLHe32
Molecular Weight	52 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:7105OMIM:103470
Alternative Names	Microphthalmia-associated transcription factor Class E basic helix-loop-helix protein 32 bHLHe32
Function	Transcription factor that regulates the expression of genes with essential roles in cell differentiation, proliferation and survival. Binds to M-boxes (5'-TCATGTG-3') and symmetrical DNA sequences (E-boxes) (5'-CACGTG-3') found in the promoters of target genes, such as BCL2 and tyrosinase (TYR). Plays an important role in melanocyte development by regulating the expression of tyrosinase (TYR) and tyrosinase-related protein 1 (TYRP1). 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.
Sequence and Domain Family	The leucine zipper region is part of a larger coiled coil.
Cellular Localization	Nucleus
Post-translational Modifications	Phosphorylation at Ser-405 significantly enhances the ability to bind the tyrosinase promoter. Phosphorylated at Ser-180 and Ser-516 following KIT signaling, trigerring a short live activation: Phosphorylation at Ser-180 and Ser-516 by MAPK and RPS6KA1, respectively, activate the transcription factor activity but also promote ubiquitination and subsequent degradation by the proteasome. Ubiquitinated following phosphorylation at Ser-180, leading to subsequent degradation by the proteasome. Deubiquitinated by USP13, preventing its degradation.