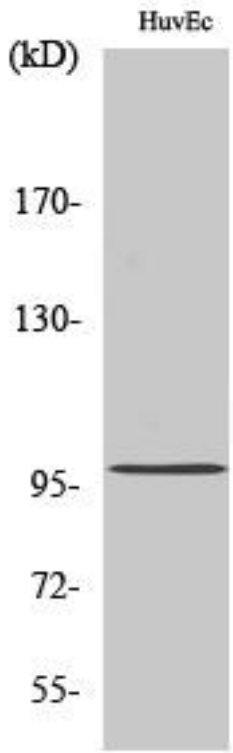
MRTF-A Monoclonal Antibody

Catalog No	YP-mAb-01878
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB
Gene Name	MKL1
Protein Name	MKL/myocardin-like protein 1
Immunogen	The antiserum was produced against synthesized peptide derived from human MKL1. AA range:10-59
Specificity	MRTF-A Monoclonal Antibody detects endogenous levels of MRTF-A protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	MKL1; KIAA1438; MAL; MKL/myocardin-like protein 1; Megakaryoblastic leukemia 1 protein; Megakaryocytic acute leukemia protein; Myocardin-related transcription factor A; MRTF-A
Observed Band	99kD
Cell Pathway	Cytoplasm . Nucleus . Subcellular location is tightly regulated by actin both in cytoplasm and nucleus: high levels of G-actin in the nucleus observed during serum deprivation lead to low levels of nuclear MRTFA, while reduced levels of nuclear G-actin result in accumulation of MRTFA in the nucleus (By similarity). G-actin-binding in the cytoplasm inhibits nuclear import by masking the nuclear localization signal (NLS) (By similarity). In contrast, binding to nuclear globular actin (G-actin) promotes nuclear export to the cytoplasm (By similarity). Nuclear localization is regulated by MICAL2, which mediates depolymerization of nuclear actin, which decreases nuclear G-actin pool, thereby promoting retention of MRTFA in the nucleus and subsequent formation of an active complex with SRF (PubM
Tissue Specificity	Ubiquitously expressed, has been detected in lung, placenta, small intestine, liver, kidney, spleen, thymus, colon, muscle, heart and brain (PubMed:11344311). Expressed in peripheral blood mononuclear cells (at protein level) (PubMed:26224645).
Function	disease:A chromosomal aberration involving MKL1 may be a cause of acute

	megakaryoblastic leukemia. Translocation t(1;22)(p13;q13) with RBM15. Although both reciprocal fusion transcripts are detected in acute megakaryoblastic leukemia (AMKL, FAB-M7), the RBM15-MKL1 chimeric protein has all the putative functional domains encoded by each gene and is the candidate oncogene.,domain:The N-terminal region is required for nuclear localization and the C-terminal region mediates transcriptional activity.,function:Transcriptional factor which uses the canonical single or multiple CArG boxes DNA sequence. Acts as a cofactor of serum response factor (SRF) and has the potential to modulate SRF-target genes. Suppresses TNF-induced cell death by inhibiting activation of caspases; its transcriptional activity is indispensable for the antiapoptotic function. It may up-regulate antiapoptotic molecules, wh
Background	The protein encoded by this gene interacts with the transcription factor myocardin, a key regulator of smooth muscle cell differentiation. The encoded protein is predominantly nuclear and may help transduce signals from the cytoskeleton to the nucleus. This gene is involved in a specific translocation event that creates a fusion of this gene and the RNA-binding motif protein-15 gene. This translocation has been associated with acute megakaryocytic leukemia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2013],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using MRTF-A Monoclonal Antibody