

MRTF-A rabbit pAb**Cat#: orb765731 (Manual)**

For research use only. Not intended for diagnostic use.

Product Name	MRTF-A rabbit pAb
Host species	Rabbit
Applications	WB;IHC;IF;ELISA
Species Cross-Reactivity	Human;Mouse
Recommended dilutions	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/5000. Not yet tested in other applications.
Immunogen	The antiserum was produced against synthesized peptide derived from human MKL1. AA range:10-59
Specificity	MRTF-A Polyclonal Antibody detects endogenous levels of MRTF-A protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide..
Storage	Store at -20°C. Avoid repeated freeze-thaw cycles.
Protein Name	MKL/myocardin-like protein 1
Gene Name	MKL1
Cellular localization	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 (PubMed)

Purification

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Clonality

Polyclonal

Concentration

1 mg/ml

Observed band

99kD

Human Gene ID

57591

Human Swiss-Prot Number

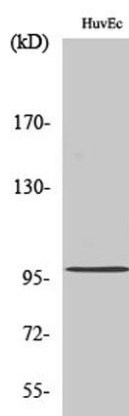
Q969V6

Alternative Names

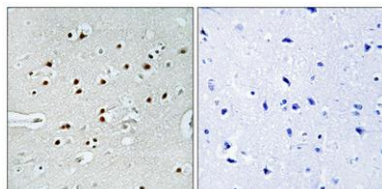
MKL1; KIAA1438; MAL; MKL/myocardin-like protein 1; Megakaryoblastic leukemia 1 protein; Megakaryocytic acute leukemia protein; Myocardin-related transcription factor A; MRTF-A

Background

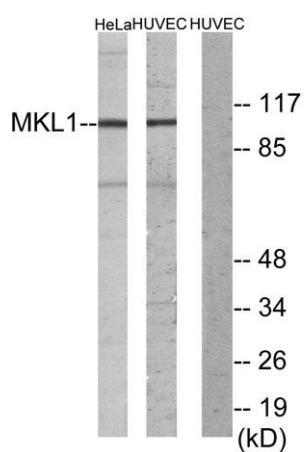
The protein encoded by this gene interacts with the transcription factor myocardin, a key regulator of smooth muscle cell differentiation. The encoded protein is predominantly nuclear and may help transduce signals from the cytoskeleton to the nucleus. This gene is involved in a specific translocation 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],



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



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by i



Western blot analysis of lysates from HUVEC and HeLa cells, using MKL1 Antibody. The lane on the right is blocked with the synthesized peptide.