

MKL1 antibody - C-terminal region
Rabbit Polyclonal Antibody
Catalog # AI11238**Specification**

MKL1 antibody - C-terminal region - Product Information

Application	WB
Primary Accession	Q8K4J6
Other Accession	NM_153049 , NP_694629
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Horse, Bovine, Dog
Predicted	Human, Mouse, Rat, Rabbit, Pig, Chicken, Horse, Bovine, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	106kDa KDa

MKL1 antibody - C-terminal region - Additional Information**Gene ID** 223701

Alias Symbol **Mal, AMKL, Bsac, Mrtf-A, AI852829, AW743281, AW821984**

Other Names

MKL/myocardin-like protein 1, Basic SAP coiled-coil transcription activator, Megakaryoblastic leukemia 1 protein homolog, Myocardin-related transcription factor A, MRTF-A, Mkl1, Bsac

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 100 ul of distilled water. Final anti-MKL1 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

MKL1 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

MKL1 antibody - C-terminal region - Protein Information**Name** Mrtfa**Function**

Transcription coactivator that associates with the serum response factor (SRF) transcription factor to control expression of genes regulating the cytoskeleton during development, morphogenesis and cell migration (PubMed:12019265, PubMed:12732141, PubMed:17588931)

target="_blank">17588931, PubMed:19350017, PubMed:24732378). The SRF-MRTFA complex activity responds to Rho GTPase-induced changes in cellular globular actin (G- actin) concentration, thereby coupling cytoskeletal gene expression to cytoskeletal dynamics (PubMed:24732378). MRTFA binds G-actin via its RPEL repeats, regulating activity of the MRTFA-SRF complex (PubMed:12732141, PubMed:17588931). Activity is also regulated by filamentous actin (F-actin) in the nucleus (PubMed:23558171, PubMed:25759381).

Cellular Location

Cytoplasm. Nucleus Note=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 (PubMed:17588931, PubMed:21673315). G-actin-binding in the cytoplasm inhibits nuclear import by masking the nuclear localization signal (NLS) (PubMed:17588931, PubMed:21673315). In contrast, binding to nuclear globular actin (G-actin) promotes nuclear export to the cytoplasm (PubMed:17588931). 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 (By similarity). {ECO:0000250|UniProtKB:Q969V6, ECO:0000269|PubMed:17588931, ECO:0000269|PubMed:21673315}

Tissue Location

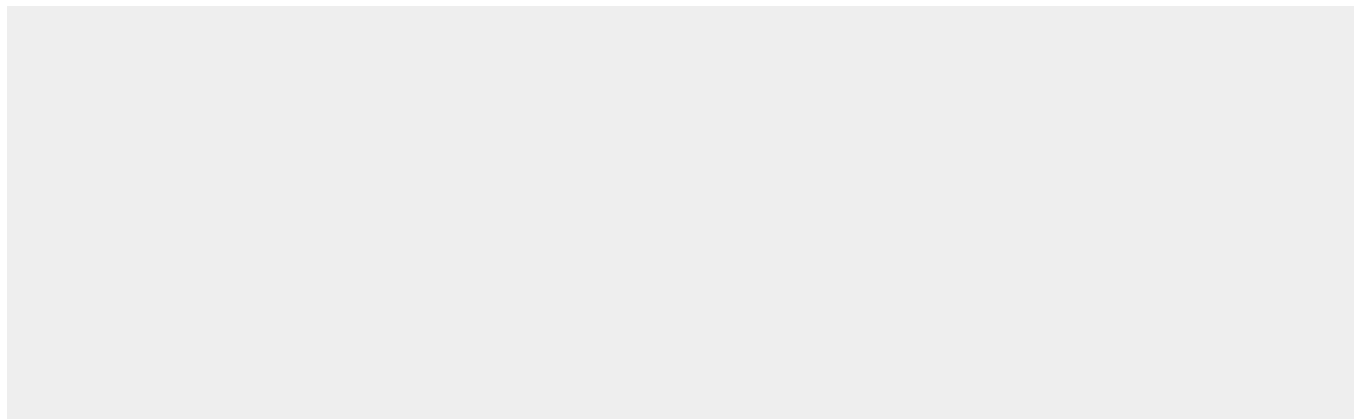
Expressed in heart, brain, spleen, lung, liver, muscle, kidney and testis.

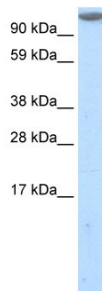
MKL1 antibody - C-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

MKL1 antibody - C-terminal region - Images





WB Suggested Anti-MKL1 Antibody Titration: 1.25 μ g/ml

ELISA Titer: 1:1562500

Positive Control: NIH/3T3 cell lysate

MKL1 antibody - C-terminal region - References

Sasazuki, T., et al., (2002) J. Biol. Chem. 277 (32), 28853-28860
Reconstitution and Storage: For short term use, store at 2-8C up to 1 week. For long term storage, store at -20C in small aliquots to prevent freeze-thaw cycles.