

MLIP Antibody

Catalog # ASC11441

Specification

MLIP Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, IF, E <u>O5VWP3</u> <u>NP_612636</u>, <u>154426278</u> Human Rabbit Polyclonal IgG MLIP antibody can be used for detection of MLIP by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.

MLIP Antibody - Additional Information

Gene ID 90523 Target/Specificity MLIP; At least three isoforms of MLIP are known to exist.

Reconstitution & Storage

MLIP antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions MLIP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

MLIP Antibody - Protein Information

Name MLIP (HGNC:21355)

Function

Required for myoblast differentiation into myotubes, possibly acting as a transcriptional regulator of the myogenic program (By similarity). Required for cardiac adaptation to stress through integrated regulation of the AKT/mTOR pathways and FOXO1. Regulates cardiac homeostasis and plays a role in the protection against cardiac hypertrophy (By similarity). Binds chromatin (By similarity). May act as a transcriptional cofactor for ISL1, repressing its transcriptional activity (By similarity). May also repress MYOCD transcriptional activity (By similarity).

Cellular Location

Nucleus. Nucleus envelope {ECO:0000250|UniProtKB:Q5FW52}. Nucleus, PML body {ECO:0000250|UniProtKB:Q5FW52}. Cytoplasm, cytosol. Cell membrane, sarcolemma {ECO:0000250|UniProtKB:Q5FW52}; Peripheral membrane protein



{ECO:0000250|UniProtKB:Q5FW52}; Cytoplasmic side {ECO:0000250|UniProtKB:Q5FW52}

Tissue Location

Predominantly expressed in the heart and skeletal muscle (PubMed:21498514, PubMed:26436652, PubMed:34581780). Also detected in liver (PubMed:21498514). [Isoform 3]: Expressed in skeletal muscle.

MLIP Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

MLIP Antibody - Images



Western blot analysis of MLIP in 293 cell lysate with MLIP antibody at 1 μ g/mL in (A) the absence and (B) the presence of blocking peptide.





Immunohistochemistry of MLIP in human heart tissue with MLIP antibody at 5 µg/mL.



Immunofluorescence of MLIP in human heart tissue with MLIP antibody at 20 µg/mL.

MLIP Antibody - Background

MLIP Antibody: The muscle-enriched A-type lamin-interacting protein (MLIP) is ubiquitously expressed, although most predominantly in heart, skeletal and smooth muscle, and interacts directly and co-localizes with lamin A and C in the nuclear envelope. MLIP also co-localizes with promyelocytic leukemia (PML) bodies within the nucleus. Decreasing lamin A/C expression with siRNA results in the upregulation and mislocalization of MLIP, suggesting that MLIP localization to the nuclear envelope is dependent on the lamin proteins. It has been suggested that MLIP may function as a tethering protein linking LMNA to factors within the nuclear envelope of within PML bodies

MLIP Antibody - References

Ahmady E, Deeke SA, Rabaa S, et al. Identification of a novel muscle A-type lamin-interacting protein (MLIP). J. Biol. Chem. 2011; 286:19702-13.