

MRTF-A (C-19): sc-21558

BACKGROUND

Serum response factor (SRF) is a transcription factor that binds the serum response element (SRE), a sequence that mediates the transient response of many cellular genes to growth stimulation. SRF regulates the transient response of several muscle genes in response to growth factors and recruits accessory myogenic factors to activate these muscle genes. SRF is required for the formation of vertebrate mesoderm leading to the origin of the cardiovascular system. Myocardin, in association with SRF in cardiac muscle cells, activates cardiac muscle promoters. Myocardin-related transcription factor A (MRTF-A), also known as MKL1, interacts with SRF and stimulates its transcriptional activity.

CHROMOSOMAL LOCATION

Genetic locus: MKL1 (human) mapping to 22q13.1; Mkl1 (mouse) mapping to 15 E1.

SOURCE

MRTF-A (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of MRTF-A of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-21558 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MRTF-A (C-19) is recommended for detection of MRTF-A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MRTF-A (C-19) is also recommended for detection of MRTF-A in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for MRTF-A siRNA (h): sc-43944, MRTF-A siRNA (m): sc-149641, MRTF-A shRNA Plasmid (h): sc-43944-SH, MRTF-A shRNA Plasmid (m): sc-149641-SH, MRTF-A shRNA (h) Lentiviral Particles: sc-43944-V and MRTF-A shRNA (m) Lentiviral Particles: sc-149641-V.

Molecular Weight of MRTF-A: 160 kDa.

Positive Controls: NIH/3T3 nuclear extract: sc-2138, NIH/3T3 whole cell lysate: sc-2210 or HeLa nuclear extract: sc-2120.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

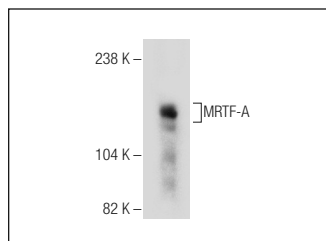
PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

DATA



MRTF-A (C-19): sc-21558. Western blot analysis of MRTF-A expression in HeLa nuclear extract.

SELECT PRODUCT CITATIONS

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- Takefuji, M., et al. 2012. G₁₃-mediated signaling pathway is required for pressure overload-induced cardiac remodeling and heart failure. *Circulation* 126: 1972-1982.
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