MRTF-A (G-8): sc-390324

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) 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 (G-8) is a mouse monoclonal antibody raised against amino acids 761-900 mapping near the C-terminus of MRTF-A of human origin.

PRODUCT
Each vial contains 200 µg IgG2a kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MRTF-A (G-8) is available conjugated to agarose (sc-390324 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-390324 HRPRP), 200 µg/ml, for WB, IHCP and ELISA; to either phycoerythrin (sc-390324 PE), fluorescein (sc-390324 FITC), Alexa Fluor® 546 (sc-390324 AF546), Alexa Fluor® 594 (sc-390324 AF594) or Alexa Fluor® 647 (sc-390324 AF647), 200 µg/ml, for WB (RGB), IF, IHCP and FCM; and to either Alexa Fluor® 680 (sc-390324 AF680) or Alexa Fluor® 790 (sc-390324 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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

APPLICATIONS
MRTF-A (G-8) is recommended for detection of MRTF-A of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).


Molecular Weight of MRTF-A: 160 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HUV-EC-C whole cell lysate: sc-364180 or HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS
To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG HRP (sc-516102 or m-IgG HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG BP-FITC: sc-516140 or m-IgG BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA

SELECT PRODUCT CITATIONS

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

PROTOCOLS
See our website at www.scbt.com for detailed protocols and support products.

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