SANTA CRUZ BIOTECHNOLOGY, INC.

MEF-2A (1C4): sc-293456

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The myocyte enhancer factor-2 (MEF-2) family of transcription factors associate with co-repressors or co-activators to regulate development and function of T cells, neuronal cells, and muscle cells. Four family members arise from alternatively spliced transcripts, termed MEF-2A, -2B, -2C, and -2D. These members bind as homo- and heterodimers to the MEF-2 site in the promoter region of affected genes. Differential regulation in the expression of the four transcripts implies functional distinction for each duing embryogenesis and development. The process of differentiation from mesodermal precursor cells to myoblasts has led to the discovery of a variety of tissue-specific factors that regulate muscle gene expression. The myogenic basic helix-loop-helix proteins, including MyoD, myogenin, Myf-5, and MRF4, are one class of identified factors. A second family of DNA binding regulatory proteins is the myocyte-specific enhancer factor-2 (MEF-2) family. Each of these proteins binds to the MEF-2 target DNA sequence present in the regulatory regions of many muscle-specific genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MEF2A (human) mapping to 15q26.3; Mef2a (mouse) mapping to 7 C.

SOURCE

MEF-2A (1C4) is a mouse monoclonal antibody raised against a recombinant protein fragment corresponding to amino acids 71-170 of MEF-2A of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

MEF-2A (1C4) is recommended for detection of MEF-2A 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MEF-2A siRNA (h): sc-35894, MEF-2A siRNA (m): sc-35895, MEF-2A shRNA Plasmid (h): sc-35894-SH, MEF-2A shRNA Plasmid (m): sc-35895-SH, MEF-2A shRNA (h) Lentiviral Particles: sc-35894-V and MEF-2A shRNA (m) Lentiviral Particles: sc-35895-V.

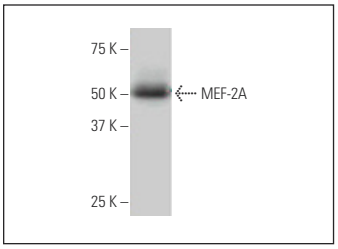
Molecular Weight of MEF-2A: 62 kDa.

Positive Controls: human lung cancer tissue extract.

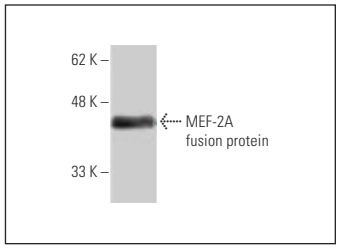
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-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).

DATA



MEF-2A (1C4): sc-293456. Western blot analysis of MEF-2A expression in human lung cancer tissue extract.



MEF-2A (1C4): sc-293456. Western blot analysis of human recombinant MEF-2A fusion protein.

STORAGE

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

RESEARCH USE

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