

MEF-2B (T-17): sc-30243

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 during 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

1. Hidaka, K., et al. 1995. The MEF-2B homologue differentially expressed in mouse embryonal carcinoma cells. *Biochem. Biophys. Res. Commun.* 213: 555-560.
2. Hobson, G.M., et al. 1995. Regional chromosomal assignments for four members of the MADS domain transcription enhancer factor 2 (MEF-2) gene family to human chromosomes 15q26, 19p12, 5q14, and 1q12-q23. *Genomics* 29: 704-711.
3. Zhao, M., et al. 1999. Regulation of the MEF-2 family of transcription factors by p38. *Mol. Cell. Biol.* 19: 21-30.

CHROMOSOMAL LOCATION

Genetic locus: MEF2B (human) mapping to 19p13.11; Mef2b (mouse) mapping to 8 B3.3.

SOURCE

MEF-2B (T-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of MEF-2B 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-30243 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-30243 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

MEF-2B (T-17) is recommended for detection of MEF-2B of human and, to a lesser extent, mouse and rat 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MEF-2B (T-17) is also recommended for detection of MEF-2B in additional species, including canine, bovine and porcine.

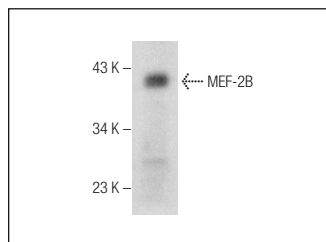
Suitable for use as control antibody for MEF-2B siRNA (h): sc-38060, MEF-2B siRNA (m): sc-38061, MEF-2B shRNA Plasmid (h): sc-38060-SH, MEF-2B shRNA Plasmid (m): sc-38061-SH, MEF-2B shRNA (h) Lentiviral Particles: sc-38060-V and MEF-2B shRNA (m) Lentiviral Particles: sc-38061-V.

MEF-2B (T-17) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

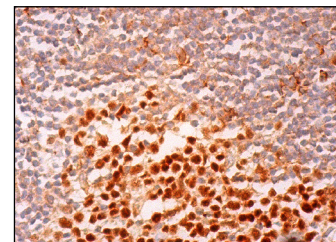
Molecular Weight of MEF-2B: 25 kDa.

Positive Controls: Daudi cell lysate: sc-2415 or MCF7 whole cell lysate: sc-2206.

DATA



MEF-2B (T-17): sc-30243. Western blot analysis of MEF-2B expression in Daudi whole cell lysate.



MEF-2B (T-17): sc-30243. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lymph node tissue showing nuclear staining of cells in germinal centers.

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **MEF-2B (C-6): sc-376504** or **MEF-2B (J-K6): sc-101097**, our highly recommended monoclonal alternatives to MEF-2B (T-17).