



## MEF-2B (L-15): sc-30245

### BACKGROUND

The myocyte enhancer factor-2 (MEF-2) family of transcription factors associate with corepressors or co-activators to regulate development and function of T cells, neuronal cells and muscle cells. Four family members, termed MEF-2A, -2B, -2C and -2D, arise from alternatively spliced transcripts. 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. The MEF-2 family represents a second class of DNA binding regulatory proteins. 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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- Han, A., et al. 2005. Mechanism of recruitment of class II histone deacetylases by myocyte enhancer factor-2. *J. Mol. Biol.* 345: 91-102.

### CHROMOSOMAL LOCATION

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

### SOURCE

MEF-2B (L-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MEF-2B of human origin.

### RESEARCH USE

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

### 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-30245 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-30245 X, 200 µg/0.1 ml.

### APPLICATIONS

MEF-2B (L-15) is recommended for detection of MEF-2B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

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 (L-15) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of MEF-2B: 25 kDa.

Positive Controls: mouse heart extract: sc-2254, mouse brain tissue extract or MCF7 whole cell lysate: sc-2206.

### RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

### 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](http://www.scbt.com) or our catalog for detailed protocols and support products.