

MDFI (2-RE35): sc-134383

BACKGROUND

MDFI (MyoD family inhibitor), also known as I-MF or I-mfa, is a 246 amino acid protein that localizes to both the nucleus and the cytoplasm and interacts with Axin and LEF-1. Functioning as a transcription factor, MDFI negatively regulates the transactivation activity of MyoD proteins, thus repressing myogenesis. More specifically, MDFI associates with MyoD proteins and blocks their nuclear localization signals, effectively sequestering MyoD family members in the cytoplasm and preventing them from binding to DNA. The gene encoding MDFI maps to human chromosome 6, which contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MDFI (human) mapping to 6p21.1.

SOURCE

MDFI (2-RE35) is a mouse monoclonal antibody raised against recombinant MDFI protein of human origin.

PRODUCT

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

APPLICATIONS

MDFI (2-RE35) is recommended for detection of MDFI of 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 MDFI siRNA (h): sc-95333, MDFI shRNA Plasmid (h): sc-95333-SH and MDFI shRNA (h) Lentiviral Particles: sc-95333-V.

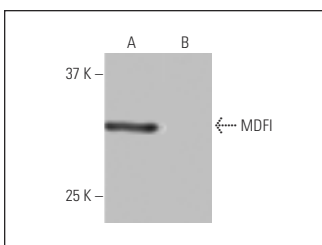
Molecular Weight of MDFI: 25 kDa.

Positive Controls: human MDFI transfected 293T whole cell lysate.

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



MDFI (2-RE35): sc-134383. Western blot analysis of MDFI expression in human MDFI transfected (A) and non-transfected (B) 293T whole cell lysates.

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.

PROTOCOLS

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