

Mad 1 (MAD1D6H4): sc-81317

BACKGROUND

It is now well established that the nature and relative abundance of individual subunits of different classes of transcription factors can positively or negatively regulate levels of gene expression. Myc proteins homodimerize and bind DNA poorly, if at all, at physiological levels. Max is a nuclear localized bHLH-Zip protein initially identified by screening a B cell expression library with the bHLH-Zip region of c-Myc. Max homodimers and the Myc-Max heterodimers bind the sequence CACGTG; however the binding of the heterodimeric complex is stronger than the Max homodimer. The Max gene products have been identified as (Max) and (Max 9) proteins that differ by a nine amino acid insertion N-terminal to the basic region. In contrast to Myc which is highly regulated during progression through the cell cycle, Max is highly stable and is much more abundant than Myc. Two members of the bHLH-Zip protein family, designated Mad and Mxi 1 homodimerize poorly but form heterodimeric complexes with Max that have opposing functions to Myc-Max heterodimers with respect to regulation of gene expression.

REFERENCES

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7. Ayer, D.E., Kretzner, L. and Eisenman, R.N. 1993. Mad: a heterodimeric partner for Max that antagonizes Myc transcriptional activity. *Cell* 72: 211-222.
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CHROMOSOMAL LOCATION

Genetic locus: MAD (human) mapping to 2p12; Mad (mouse) mapping to 6 D1.

STORAGE

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

SOURCE

Mad 1 (MAD1D6H4) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the N-terminus of Mad 1 of human origin.

PRODUCT

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

APPLICATIONS

Mad 1 (MAD1D6H4) is recommended for detection of Mad 1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for Mad 1 siRNA (h): sc-38073.

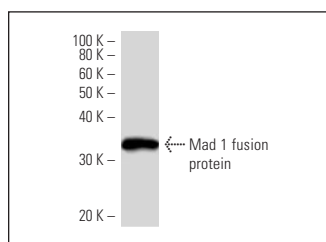
Molecular Weight of Mad 1: 35 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or BJAB nuclear extract: sc-2145.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



Mad 1 (MAD1D6H4): sc-81317. Western Blot analysis of human recombinant Mad 1 fusion protein.

RESEARCH USE

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