



SZABO SCANDIC

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

Mad 1 (1-221): sc-4086 WB

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 21 kDa (Max) and 22 kDa (Max 9) proteins that differ by a 9 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 Mxi1, homodimerize poorly but form heterodimeric complexes with Max that have opposing functions to Myc-Max heterodimers with respect to regulation of gene expression.

REFERENCES

1. Jones, N. 1990. Transcriptional regulation by dimerization: two sides to an incestuous relationship. *Cell* 61: 9-11.
2. Dang, C.V., et al. 1991. Intracellular leucine zipper interactions suggest c-Myc hetero-oligomerization. *Mol. Cell. Biol.* 11: 954-962.
3. Blackwood, E.M. and Eisenman, R.N. 1991. Max: A helix-loop-helix zipper protein that forms a sequence-specific DNA-binding complex with Myc. *Science* 251: 1211-1217.
4. Prendergast, G.C., Lawe, D., and Ziff, E.B. 1991. Association of Myn, the murine homolog of Max, with c-Myc stimulates methylation-sensitive DNA binding and Ras cotransformation. *Cell* 65: 395-407.
5. Amati, B., et al. 1992. Oncogenic activity of the c-Myc protein requires dimerization with Max. *Cell* 72: 233-245.
6. Mukherjee, B., Morgenbesser, S.D., and DePinho, R.A. 1992. Myc family oncoproteins function through a common pathway to transform normal cells in culture: cross-interference by Max and trans-acting dominant mutants. *Genes Dev.* 6: 1480-1492.
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.
8. Zervos, A.S., Gyuris, J., and Brent, R. 1993. Mxi1, a protein that specifically interacts with Max to bind Myc-Max recognition sites. *Cell* 72: 223-232.

SOURCE

Mad 1 (1-221) is expressed in *E. coli* as a 27 kDa polyhistidine tagged fusion protein corresponding to amino acids 1-221 representing full length Mad 1 of human origin.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

PRODUCT

Mad 1 (1-221) is purified from bacterial lysates (>98%) by Ni⁺⁺ affinity chromatography; supplied as 10 µg in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

Mad 1 (1-221) is suitable as a Western blotting control for sc-222, sc-766, sc-8012 and sc-8036.

RESEARCH USE

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