

Nmi (h): 293 Lysate: sc-110568

BACKGROUND

Nmi (for N-Myc interactor) is an interferon inducible protein that associates with multiple transcription factors, including c-Myc, N-Myc, Max and c-Fos, which contain bHLH-ZIP, bHLH or ZIP domains. Nmi is ubiquitously expressed at low levels throughout various fetal and adult tissues and at higher levels in myeloid leukemias and cell lines overexpressing c-Myc. In addition to binding Myc proteins, Nmi also associates with the Stat family of transcription factors, where it enhances Stat-dependent transcription. Although Nmi lacks an intrinsic DNA binding or activation domain, Nmi enhances the transcriptional activity of the Stat proteins, in response to cytokine stimulation, by recruiting the Stat1 and Stat5 transcriptional coactivators, CREB-binding protein (CBP) and p300. *In vitro* studies indicate that Nmi, expressed in conjunction with CBP, enhances the transcriptional responsiveness of Stat5 to IL-2 stimulation five fold over CBP alone by increasing the affinity of Stat proteins for CBP/p300.

REFERENCES

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4. Gingras, S., et al. 1999. p300/CBP is required for transcriptional induction by interleukin-4 and interacts with Stat6. *Nucleic Acids Res.* 27: 2722-2729.
5. Sakamuro, D. et al. 1999. New Myc-interacting proteins: a second Myc network emerges. *Oncogene* 18: 2942-2954.
6. Zhu, M., et al. 1999. Functional association of Nmi with Stat5 and Stat1 in IL-2- and IFN- γ -mediated signaling. *Cell* 96: 121-130.
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8. Sun, G.J. et al. 2002. Identification of a protein interacting with apoptin from human leucocyte cDNA library by using yeast two-hybrid screening. *Sheng Wu Hua Xue Yu Sheng Wu Wu Li Xue Bao* 34: 369-372.
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STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: NMI (human) mapping to 22q13.3.

PRODUCT

Nmi (h): 293 Lysate represents a lysate of human Nmi transfected 293 cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

Nmi (h): 293 Lysate is suitable as a Western Blotting positive control for human reactive Nmi antibodies.

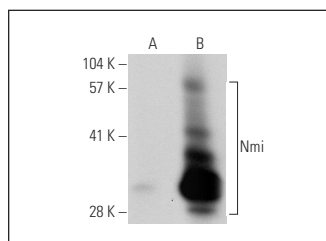
Control 293 Lysate: sc-110760 is available as a Western Blotting negative control lysate derived from non-transfected 293 cells.

Nmi (XX-22): sc-101100 is recommended as a positive control antibody for Western Blot analysis of enhanced human Nmi expression in Nmi transfected 293 cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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.

DATA



Nmi (XX-22): sc-101100. Western blot analysis of Nmi expression in non-transfected: sc-110760 (A) and human Nmi transfected: sc-110568 (B) 293 whole cell lysates.

RESEARCH USE

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