



**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](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](http://linkedin.com/company/szaboscandic)



# N-Myc (m): 293T Lysate: sc-121906

## BACKGROUND

The v-Myc oncogene, initially identified in the MC29 avian retrovirus, causes myelocytomas, carcinomas, sarcomas and lymphomas, and belongs to a family of oncogenes conserved throughout evolution. In humans, the family consists of five genes: c-Myc, N-Myc, R-Myc, L-Myc and B-Myc. Amplification of the N-Myc gene has been found in human neuroblastomas and cell lines. The extent of N-Myc amplification correlates well with the stage of neuroblastoma disease. Immunological studies have shown that the human N-Myc gene encodes a nuclear phosphoprotein that exhibits relatively short (30 min) half life *in vivo*. The prototype member of the family, c-Myc p67, binds DNA in a sequence-specific manner subsequent to dimerization with a second basic region helix-loop-helix leucine zipper motif protein designated Max.

## REFERENCES

- Schwab, M., Alitalo, K., Klempnauer, K., Varmus, H.E., Bishop, J.M., Gilbert, F., Brodeur, G., Goldstein, M. and Trent, J. 1983. Amplified DNA with limited homology to Myc cellular oncogene is shared by human neuroblastoma cell lines and a neuroblastoma tumor. *Nature* 305: 245-248.
- Brodeur, G.M., Seeger, R.C., Schwab, M., Varmus, H.E. and Bishop, J.M. 1984. Amplification of N-Myc in untreated human neuroblastomas correlates with advanced disease stage. *Science* 224: 1121-1124.
- Cole, M.D. 1986. The Myc oncogene: its role in transformation and differentiation. *Annu. Rev. Genet.* 20: 361-384.
- LeGouy, E., DePinho, R., Zimmerman, D., Ferrier, P., Collum, R. and Alt, F.W. 1987. Structure and expression of Myc-family genes. In Harlow, E., Alt, F.W. and Ziff, E., eds., *Nuclear Oncogenes*. Cold Spring Harbor, NY: Cold Spring Harbor Laboratory, 144-151.
- 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.
- 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.
- Bosrone, S.A., Asselin, C., Patel, A.J. and Marcu, K.B. 1992. MAZ, a zinc finger protein, binds to c-Myc and C2 gene sequences regulating transcriptional initiation and termination. *Proc. Natl. Acad. Sci. USA* 89: 7452-7456.
- Beierle, E.A., Trujillo, A., Nagaram, A., Kurenova, E.V., Finch, R., Ma, X., Vella, J., Cance, W.G. and Golubovskaya, V.M. 2007. N-Myc regulates focal adhesion kinase expression in human neuroblastoma. *J. Biol. Chem.* 282: 12503-12516.
- Braydich-Stolle, L., Kostereva, N., Dym, M. and Hofmann, M.C. 2007. Role of Src family kinases and N-Myc in spermatogonial stem cell proliferation. *Dev. Biol.* 304: 34-45.

## CHROMOSOMAL LOCATION

Genetic locus: MYCN (human) mapping to 2p24.3.

## RESEARCH USE

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

## PRODUCT

N-Myc (m): 293T Lysate represents a lysate of mouse N-Myc transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

N-Myc (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive N-Myc antibodies. Recommended use: 10-20 µl per lane.

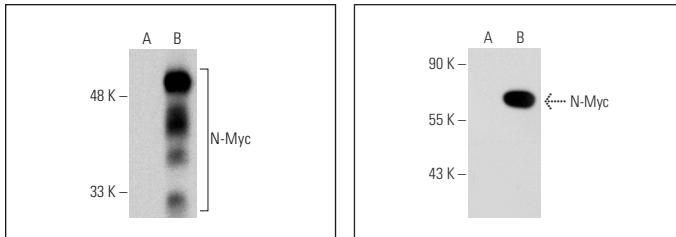
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

N-Myc (B8.4.B): sc-53993 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse N-Myc expression in N-Myc transfected 293T 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<sub>x</sub> BP-HRP: sc-516102 or m-IgG<sub>x</sub> 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



N-Myc (B8.4.B) HRP: sc-53993 HRP. Direct western blot analysis of N-Myc expression in non-transfected: sc-117752 (**A**) and mouse N-Myc transfected: sc-121906 (**B**) 293T whole cell lysates.

N-Myc (3C165): sc-71633. Western blot analysis of N-Myc expression in non-transfected: sc-117752 (**A**) and mouse N-Myc transfected: sc-121906 (**B**) 293T whole cell lysates.

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