



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

# MafG (m2): 293T Lysate: sc-125575

## BACKGROUND

Members of the Maf family of basic region/leucine zipper (bZIP) transcription factors affect transcription in either a positive or negative fashion, depending on their particular protein partner and the context of the target promoter. c-Maf (Maf-2) and the closely related family members, neural retina leucine zipper (Nrl), L-Maf, and Krml1/MafB (Maf-1), all bind to T-MARE sites and are implicated in a wide variety of developmental and physiologic roles. The three small Maf family proteins MafF, MafG, and MafK are components of NF-E2 which function as heterodimers with the large tissue-restricted subunit of NF-E2 called p45, and furthermore are implicated in the transcriptional regulation of many erythroid-specific genes. MafG is ubiquitously expressed, with highest expression in the VMS, heart and skeletal muscle; its expression is induced in response to stress. MafK, also designated NF-E2 p18, is primarily expressed during development in mesenchymal and hematopoietic cells and neurons. MafK heterodimerizes with NF-E2 and various CNC proteins. MafF is most abundantly expressed in the lung and is thought to compensate for loss of function mutations in MafG and MafK.

## REFERENCES

1. Kerppola, T.K. and Curran, T. 1994. A conserved region adjacent to the basic domain is required for recognition of an extended DNA binding site by Maf/Nrl family proteins. *Oncogene* 9: 3149-3158.
2. Igarashi, K., Itoh, K., Hayashi, N., Nishizawa, M. and Yamamoto, M. 1995. Conditional expression of the ubiquitous transcription factor MafK induces erythroleukemia cell differentiation. *Proc. Natl. Acad. Sci. USA* 92: 7445-7449.
3. Johnsen, O., Skammelsrud, N., Luna, L., Nishizawa, M., Prydz, H. and Kolsto, A.B. 1996. Small Maf proteins interact with the human transcription factor TCF11/Nrf1/LCR-F1. *Nucleic Acids Res.* 24: 4289-4297.
4. Motohashi, H., Ohta, J., Engel, J.D. and Yamamoto, M. 1998. A core region of the MafK gene 5' promoter directs neurone-specific transcription *in vivo*. *Genes Cells* 3: 671-684.
5. Onodera, K., Shavit, J.A., Motohashi, H., Katsuoka, F., Akasaka, J.E., Engel, J.D. and Yamamoto, M. 1999. Characterization of the murine MafF gene. *J. Biol. Chem.* 274: 21162-21169.
6. Ring, B.Z., Cordes, S.P., Overbeek, P.A. and Barsh, G.S. 2000. Regulation of mouse lens fiber cell development and differentiation by the Maf gene. *Development* 127: 307-317.
7. Shimokawa, N., Okada, J. and Miura, M. 2000. Cloning of MafG homologue from the rat brain by differential display and its expression after hypercapnic stimulation. *Mol. Cell. Biochem.* 203: 135-141.
8. Suzuki, T., Blank, V., Sesay, J.S. and Crawford, D.R. 2001. Maf genes are involved in multiple stress response in human. *Biochem. Biophys. Res. Commun.* 280: 4-8.

## 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.

## CHROMOSOMAL LOCATION

Genetic locus: Mafg (mouse) mapping to 11 E2.

## PRODUCT

MafG (m2): 293T Lysate represents a lysate of mouse MafG transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

## APPLICATIONS

MafG (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive MafG antibodies. Recommended use: 10-20 µl per lane.

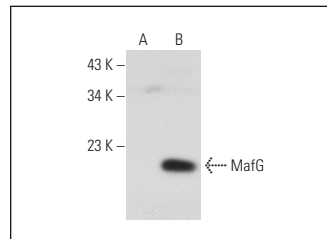
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

MafF/G/K (D-12): sc-166548 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse MafG expression in MafG 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-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.

## DATA



MafF/G/K (D-12): sc-166548. Western blot analysis of MafG expression in non-transfected: sc-117752 (A) and mouse MafG transfected: sc-125575 (B) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.