

MafG (Y-25): sc-133770

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

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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 1N 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.
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CHROMOSOMAL LOCATION

Genetic locus: MAFG (human) mapping to 17q25.3; Mafg (mouse) mapping to 11 E2.

SOURCE

MafG (Y-25) is an affinity purified rabbit polyclonal antibody raised against synthetic MafG peptide of human origin.

PRODUCT

Each vial contains 50 µg IgG in 500 µl PBS with < 0.1% sodium azide, 0.1% gelatin and < 0.02% sucrose.

APPLICATIONS

MafG (Y-25) is recommended for detection of MafG of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for MafG siRNA (h): sc-38099, MafG siRNA (m): sc-38100, MafG shRNA Plasmid (h): sc-38099-SH, MafG shRNA Plasmid (m): sc-38100-SH, MafG shRNA (h) Lentiviral Particles: sc-38099-V and MafG shRNA (m) Lentiviral Particles: sc-38100-V.

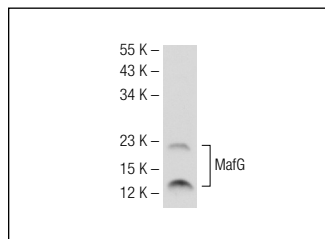
Molecular Weight of MafG: 18 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or NIH/3T3 whole cell lysate: sc-2210.

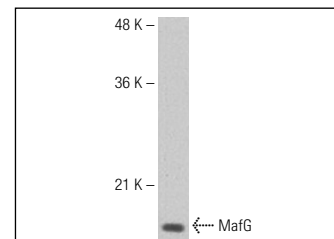
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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



MafG (Y-25): sc-133770. Western blot analysis of MafG expression in NIH/3T3 whole cell lysate.



MafG (Y-25): sc-133770. Western blot analysis of MafG expression in Hep G2 whole cell lysate.

STORAGE

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

RESEARCH USE

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

MONOS
Satisfaction
Guaranteed

Try **MafF/G/K (D-12): sc-166548**, our highly recommended monoclonal alternative to MafG (Y-25).