

MafB (E-20): sc-10023

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 have been 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 that function as heterodimers with the large tissue-restricted subunit of NF-E2 called p45, and they are implicated in the transcriptional regulation of many erythroid-specific genes. MafB is expressed in a wide variety of tissues and encodes a protein containing a typical bZip motif in its carboxy-terminal region. As a transcriptional activator, MafB plays a pivotal role in regulating lineage-specific gene expression during hematopoiesis by repressing Ets-1-mediated transcription of key erythroid-specific genes in myeloid cells. c-Maf interacts with the c-Myb DNA binding domain and forms Myb-Maf complexes, which in turn mediate the cooperative interactions between c-Myb and Ets-1 during early myeloid cell differentiation.

REFERENCES

1. Kerppola, T.K., et al. 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., et al. 1995. Conditional expression of the ubiquitous transcription factor MafK induces erythroleukemia cell differentiation. *Proc. Natl. Acad. Sci. USA* 92: 7445-7449.

CHROMOSOMAL LOCATION

Genetic locus: MAFB (human) mapping to 20q12; MafB (mouse) mapping to 2 H2.

SOURCE

MafB (E-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MafB of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-10023 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-10023 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

MafB (E-20) is recommended for detection of MafB 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)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MafB (E-20) is also recommended for detection of MafB in additional species, including canine, bovine, porcine and avian.

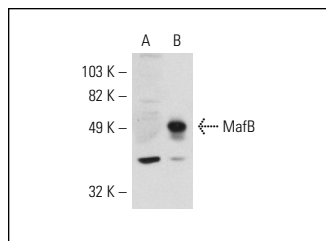
Suitable for use as control antibody for MafB siRNA (h): sc-35839, MafB siRNA (m): sc-35840, MafB shRNA Plasmid (h): sc-35839-SH, MafB shRNA Plasmid (m): sc-35840-SH, MafB shRNA (h) Lentiviral Particles: sc-35839-V and MafB shRNA (m) Lentiviral Particles: sc-35840-V.

MafB (E-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of MafB: 43 kDa.

Positive Controls: MafB (h): CHO Lysate: sc-110001, HL-60 whole cell lysate: sc-2209 or K-562 whole cell lysate: sc-2203.

DATA



MafB (E-20): sc-10023. Western blot analysis of human MafB expression in non-transfected: sc-117750 (A) and human MafB transfected: sc-110001 (B) CHO whole cell lysates.

SELECT PRODUCT CITATIONS

1. Kataoka, K., et al. 2002. MafA is a glucose-regulated and pancreatic β -cell-specific transcriptional activator for the Insulin gene. *J. Biol. Chem.* 277: 49903-49910.

PROTOCOLS

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


 MONOS
Satisfaction
Guaranteed

Try **MafB (F-11): sc-74521** or **MafB (B-11): sc-376387**, our highly recommended monoclonal alternatives to MafB (E-20).