SANTA CRUZ BIOTECHNOLOGY, INC.

MafB (H-100): sc-22830



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 carboxyterminal 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 inturn 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.
- 3. Kataoka, K., et al. 1995. Small Maf proteins heterodimerize with Fos and may act as competitive repressors of the NF-E2 transcription factor. Mol. Cell. Biol. 15: 2180-2190.
- 4. Johnsen, O., et al. 1996. Small Maf proteins interact with the human transcription factor TCF11/Nrf1/LCR-F1. Nucleic Acids Res. 24: 4289-4297.

CHROMOSOMAL LOCATION

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

SOURCE

MafB (H-100) is a rabbit polyclonal antibody raised against amino acids 111-210 of MafB of human origin.

PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-22830 X, 200 µg/0.1 ml.

RESEARCH USE

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

APPLICATIONS

MafB (H-100) 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 (H-100) is also recommended for detection of MafB in additional species, including porcine.

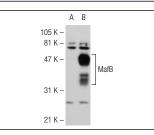
Suitable for use as control antibody for MafB siRNA (h): sc-35839, MafB siRNA (m): sc-35840, MafB shRNA Plasmid (h): sc-35839-SH, MafB shRNA Plasmid (m): sc-35840-SH, MafB shRNA (h) Lentiviral Particles: sc-35839-V and MafB shRNA (m) Lentiviral Particles: sc-35840-V.

MafB (H-100) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of MafB: 43 kDa.

Positive Controls: MafB (h2): 293T Lysate: sc-114754, HL-60 whole cell lysate: sc-2209 or K-562 whole cell lysate: sc-2203.

DATA



MafB (H-100): sc-22830. Western blot analysis of MafB expression in non-transfected: sc-117752 (A) and human MafB transfected: sc-114754 (B) 293T whole cell lysates

STORAGE

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

PROTOCOLS

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

Try MafB (F-11): sc-74521 or MafB (B-11): MONOS Satisfation Guaranteed

sc-376387, our highly recommended monoclonal alternatives to MafB (H-100).