SANTA CRUZ BIOTECHNOLOGY, INC.

c-Maf (E-20): sc-10019



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 lineagespecific 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.
- 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: MAF (human) mapping to 16q23.2; Maf (mouse) mapping to 8 E1.

SOURCE

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

Blocking peptide available for competition studies, sc-10019 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-10019 X, 200 µg/0.1 ml.

APPLICATIONS

c-Maf (E-20) is recommended for detection of c-Maf of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

c-Maf (E-20) is also recommended for detection of c-Maf in additional species, including equine, bovine and avian.

Suitable for use as control antibody for c-Maf siRNA (h): sc-38111, c-Maf siRNA (m): sc-38112, c-Maf shRNA Plasmid (h): sc-38111-SH, c-Maf shRNA Plasmid (m): sc-38112-SH, c-Maf shRNA (h) Lentiviral Particles: sc-38111-V and c-Maf shRNA (m) Lentiviral Particles: sc-38112-V.

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

Molecular Weight of c-Maf: 50 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

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.

PROTOCOLS

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

MONOS Satisfation Guaranteed

Try c-Maf (6B8): sc-293420, our highly recommended monoclonal aternative to c-Maf (E-20).