SANTA CRUZ BIOTECHNOLOGY, INC.

c-Maf (E-7): sc-518062

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 Kreml1/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: MAF (human) mapping to 16q23.2; Maf (mouse) mapping to 8 E1.

SOURCE

c-Maf (E-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 1-21 at the N-terminus of c-Maf of human origin.

PRODUCT

Each vial contains 200 µg IgM kappa light chain 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-518062 X, 200 µg/0.1 ml.

c-Maf (E-7) is available conjugated to agarose (sc-518062 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-518062 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-518062 PE), fluorescein (sc-518062 FITC), Alexa Fluor® 488 (sc-518062 AF488), Alexa Fluor® 546 (sc-518062 AF546), Alexa Fluor® 594 (sc-518062 AF594) or Alexa Fluor® 647 (sc-518062 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-518062 AF680) or Alexa Fluor® 790 (sc-518062 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

STORAGE

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

APPLICATIONS

c-Maf (E-7) is recommended for detection of c-Maf of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

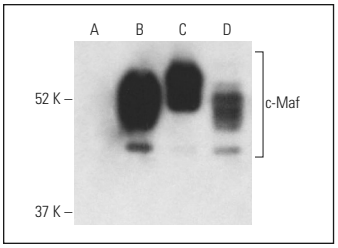
Suitable for use as control antibody for c-Maf siRNA (h): sc-38111, c-Maf siRNA (m): sc-38112, c-Maf shRNA Plasmid (h): sc-38111-SH, c-Maf shRNA Plasmid (m): sc-38112-SH, c-Maf shRNA (h) Lentiviral Particles: sc-38111-V and c-Maf shRNA (m) Lentiviral Particles: sc-38112-V.

c-Maf (E-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

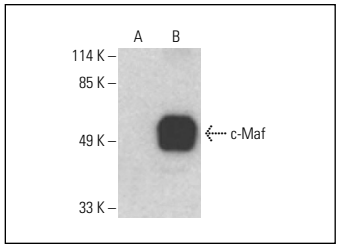
Molecular Weight of c-Maf: 50 kDa.

Positive Controls: MafB (h2): 293T Lysate: sc-114754 or mouse c-Maf transfected 293T whole cell lysate.

DATA



c-Maf (E-7): sc-518062. Western blot analysis of c-Maf expression in non-transfected 293T: sc-117752 (**A**), human MafB transfected 293T: sc-114754 (**B**), mouse c-Maf transfected 293T (**C**) and RPMI-8226 (**D**) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.



c-Maf (E-7): sc-518062. Western blot analysis of c-Maf expression in non-transfected (**A**) and mouse c-Maf transfected (**B**) 293T whole cell lysates.

SELECT PRODUCT CITATIONS

1. Zhang, B., et al. 2020. CD127 imprints functional heterogeneity to diversify monocyte responses in human inflammatory diseases. bioRxiv. E-published.
2. Zhang, B., et al. 2022. CD127 imprints functional heterogeneity to diversify monocyte responses in inflammatory diseases. J. Exp. Med. 219: e20211191.
3. Liao, Y., et al. 2023. 5-HT modulates the properties of dendritic cells to interfere with the development of type 1 regulating T cells. Mol. Immunol. 160: 161-167.
4. Peng, Q., et al. 2024. TRIM41 contributes to the pathogenesis of airway allergy by compromising dendritic cells' tolerogenic properties. iScience 27: 110067.

RESEARCH USE

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