SANTA CRUZ BIOTECHNOLOGY, INC.

MAZ (H-50): sc-28745

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The Myc-associated zinc finger protein MAZ (also designated ZF87, and Pur-1 in mouse) is a transcription factor that participates in both the initiation and termination of transcription of target genes. MAZ functions as a true transcriptional repressor in that it represses transcription independent of the c-Myc promoter. Both MAZ and SP1 bind to the parathyroid hormone (PTH)/ PTH-related peptide receptor promoter, thereby influencing the cell-specific expression of its gene product. MAZ and SP1 also regulate expression from the serotonin 1A receptor gene promoter, suggesting that MAZ may act on a variety of promoters through G-C rich sequences, which serve as binding sites for the SP1 family of transcription factors. Competition between SP1 and MAZ control tissue-specific expression of the PNMT gene. The interaction of MAZ with the transcriptional repressor FAC1 may affect gene regulation in neurodegeneration. MAZ also acts as a growth suppressor protein, in part by affecting the levels of key cell cycle regulatory proteins such as cyclin A and E.

CHROMOSOMAL LOCATION

Genetic locus: MAZ (human) mapping to 16p11.2; Maz (mouse) mapping to 7 F3.

SOURCE

MAZ (H-50) is a rabbit polyclonal antibody raised against amino acids 381-430 mapping near the C-terminus of MAZ 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-28745 X, 200 µg/0.1 ml.

APPLICATIONS

MAZ (H-50) is recommended for detection of MAZ 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).

MAZ (H-50) is also recommended for detection of MAZ in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for MAZ siRNA (h): sc-38035, MAZ siRNA (m): sc-38036, MAZ shRNA Plasmid (h): sc-38035-SH, MAZ shRNA Plasmid (m): sc-38036-SH, MAZ shRNA (h) Lentiviral Particles: sc-38035-V and MAZ shRNA (m) Lentiviral Particles: sc-38036-V.

MAZ (H-50) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

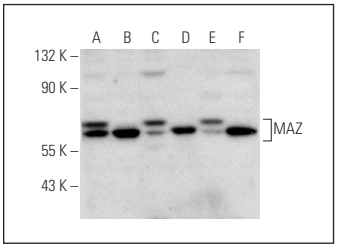
Moledular Weight of MAZ: 60 kDa.

Positive Controls: HeLa nuclear extract: sc-2120, THP-1 nuclear extract: sc-24963 or K-562 nuclear extract: sc-2130.

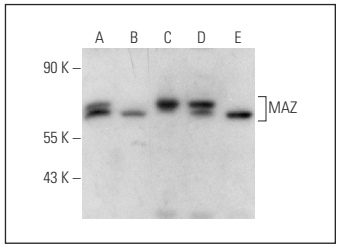
STORAGE

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

DATA



MAZ (H-50): sc-28745. Western blot analysis of MAZ expression in HeLa (**A**), THP-1 (**B**), A549 (**C**), HL-60 (**D**), MCF7 (**E**) and K-562 (**F**) nuclear extracts.



MAZ (H-50): sc-28745. Western blot analysis of MAZ expression in HeLa (**A**), THP-1 (**B**), NCI-H226 (**C**), HT-1080 (**D**) and CCRF-CEM (**E**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Wang, X., et al. 2008. MAZ drives tumor-specific expression of PPAR γ 1 in breast cancer cells. Breast Cancer Res. Treat. 111: 103-111.
2. Kanada, S., et al. 2008. Two different transcription factors discriminate the -315C>T polymorphism of the Fc ε RI α gene: binding of Sp1 to -315C and of a high mobility group-related molecule to -315T. J. Immunol. 180: 8204-8210.
3. Sohl, M., et al. 2009. Characterization of the murine Ephrin-B2 promoter. Gene 437: 54-59.
4. Bianchi, M., et al. 2009. A potent enhancer element in the 5'-UTR intron is crucial for transcriptional regulation of the human ubiquitin C gene. Gene 448: 88-101.
5. Cogoi, S., et al. 2010. The KRAS promoter responds to Myc-associated zinc finger and poly(ADP-ribose) polymerase 1 proteins, which recognize a critical quadruplex-forming GA-element. J. Biol. Chem. 285: 22003-22016.
6. Sohl, M., et al. 2010. Sp1 mediate hypoxia induced ephrinB2 expression via a hypoxia-inducible factor independent mechanism. Biochem. Biophys. Res. Commun. 391: 24-27.
7. Qiao, H., et al. 2011. Regulation of the human ascorbate transporter SVCT2 exon 1b gene by zinc-finger transcription factors. Free Radic. Biol. Med. 50: 1196-1209.

RESEARCH USE

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