

MAZ (133.7): sc-130915

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 (133.7) is a mouse monoclonal antibody raised against a heparin-agarose purified MAZ-maltose binding fusion protein of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

MAZ (133.7) is available conjugated to agarose (sc-130915 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-130915 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-130915 PE), fluorescein (sc-130915 FITC), Alexa Fluor® 488 (sc-130915 AF488), Alexa Fluor® 546 (sc-130915 AF546), Alexa Fluor® 594 (sc-130915 AF594) or Alexa Fluor® 647 (sc-130915 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-130915 AF680) or Alexa Fluor® 790 (sc-130915 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

MAZ (133.7) 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)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

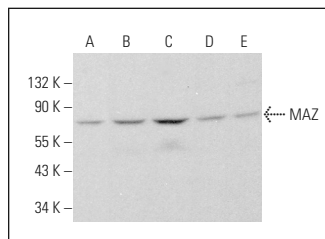
Molecular Weight of MAZ: 60 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, Jurkat whole cell lysate: sc-2204 or CCRF-CEM cell lysate: sc-2225.

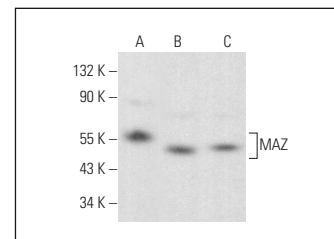
STORAGE

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

DATA



MAZ (133.7): sc-130915. Western blot analysis of MAZ expression in c4 (A), HT-1080 (B), CCRF-CEM (C), RAW 264.7 (D) and Sol8 (E) whole cell lysates.



MAZ (133.7): sc-130915. Western blot analysis of MAZ expression in Hep G2 (A), Jurkat (B) and THP-1 (C) whole cell lysates.

SELECT PRODUCT CITATIONS

- Cogoi, S., et al. 2018. The regulatory G₄ motif of the Kirsten Ras (KRAS) gene is sensitive to guanine oxidation: implications on transcription. *Nucleic Acids Res.* 46: 661-676.
- Sin-Chan, P., et al. 2019. A C19MC-LIN28A-MYCN oncogenic circuit driven by hijacked super-enhancers is a distinct therapeutic vulnerability in ETMRs: a lethal brain tumor. *Cancer Cell* 36: 51-67.e7.
- Ferino, A., et al. 2020. The ROS-KRAS-Nrf2 axis in the control of the redox homeostasis and the intersection with survival-apoptosis pathways: implications for photodynamic therapy. *J. Photochem. Photobiol. B, Biol.* 202: 111672.
- Cinque, G., et al. 2020. Role of poly [ADP-ribose] polymerase 1 in activating the Kirsten Ras (KRAS) gene in response to oxidative stress. *Int. J. Mol. Sci.* 21: 6237.
- Yasar, P., et al. 2021. A CpG island promoter drives the CXXC5 gene expression. *Sci. Rep.* 11: 15655.
- Ferino, A., et al. 2021. hnRNPA1/UP1 unfolds KRAS G-quadruplexes and feeds a regulatory axis controlling gene expression. *ACS Omega* 6: 34092-34106.
- Pramanik, S., et al. 2022. The human AP-endonuclease 1 (APE1) is a DNA G-quadruplex structure binding protein and regulates KRAS expression in pancreatic ductal adenocarcinoma cells. *Nucleic Acids Res.* 50: 3394-3412.

RESEARCH USE

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

PROTOCOLS

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

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