

MAZ (L-20): sc-13484

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 controls 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.

REFERENCES

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2. Song, J., et al. 1998. Genomic organization and expression of a human gene for Myc-associated zinc finger protein (MAZ). *J. Biol. Chem.* 273: 20603-20614.
3. Song, J., et al. 1998. Human genes for KNSL4 and MAZ are located close to one another on chromosome 16p11.2. *Genomics* 52: 374-377.
4. Izzo, M.W., et al. 1999. Transcriptional repression from the c-Myc P2 promoter by the zinc finger protein ZF87/MAZ. *J. Biol. Chem.* 274: 19498-19506.
5. Her, S., et al. 1999. Phenyl-ethanolamine N-methyltransferase gene expression. Sp1 and MAZ potential for tissue-specific expression. *J. Biol. Chem.* 274: 8698-8707.
6. Song, J., et al. 1999. Structural organization and expression of the mouse gene for Pur-1, a highly conserved homolog of the human MAZ gene. *Eur. J. Biochem.* 259: 676-683.
7. Williams, L.J. and Abou-Samra, A.B. 2000. The transcription factors SP1 and MAZ regulate expression of the parathyroid hormone/parathyroid hormone-related peptide receptor gene. *J. Mol. Endocrinol.* 25: 309-310.

CHROMOSOMAL LOCATION

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

SOURCE

MAZ (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of MAZ of human origin.

STORAGE

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

PRODUCT

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

Blocking peptide available for competition studies, sc-13484 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-13484 X, 200 µg/0.1 ml.

APPLICATIONS

MAZ (L-20) 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), 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 (L-20) 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 (L-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of MAZ: 60 kDa.

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.

SELECT PRODUCT CITATIONS

1. Campanero, M.R., et al. 2008. The histone deacetylase inhibitor trichostatin A induces GADD45 γ expression via Oct and NF-Y binding sites. *Oncogene* 27: 1263-1272.

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.