SANTA CRUZ BIOTECHNOLOGY, INC.

MCPIP (H-6): sc-515275

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

MCPIP (MCP-induced protein 1), also known as ZC3H12A (zinc finger CCCH-type containing 12A), is a 599 amino acid protein that localizes to the nucleus and contains one C3H1-type zinc finger. Functioning as a transcriptional activator, MCPIP triggers apoptosis and promotes MCP-1 and CJR-2B-induced angiogenesis, possibly playing a role in the development of acute monocytic leukemia. Overexpression of MCPIP is associated with ischemic heart disease, a condition characterized by reduced blood flow to the heart, often as a result of coronary artery disease. The gene encoding MCPIP maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome.

CHROMOSOMAL LOCATION

Genetic locus: ZC3H12A (human) mapping to 1p34.3; Zc3h12a (mouse) mapping to 4 D2.2.

SOURCE

MCPIP (H-6) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 508-523 near the C-terminus of MCPIP 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.

Blocking peptide available for competition studies, sc-515275 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

STORAGE

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

APPLICATIONS

MCPIP (H-6) is recommended for detection of MCPIP 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 MCPIP siRNA (h): sc-78944, MCPIP siRNA (m): sc-149320, MCPIP siRNA (r): sc-156178, MCPIP shRNA Plasmid (h): sc-78944-SH, MCPIP shRNA Plasmid (m): sc-149320-SH, MCPIP shRNA Plasmid (r): sc-156178-SH, MCPIP shRNA (h) Lentiviral Particles: sc-78944-V, MCPIP shRNA (m) Lentiviral Particles: sc-149320-V and MCPIP shRNA (r) Lentiviral Particles: sc-156178-V.

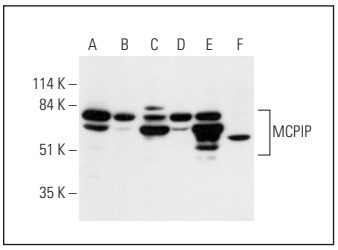
Molecular Weight of MCPIP: 66 kDa.

Positive Controls: RAW 264.7 whole cell lysate: sc-2211, A-431 whole cell lysate: sc-2201 or Caki-1 cell lysate: sc-2224.

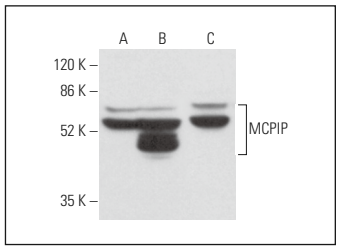
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein L-Agarose: sc-2336 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



MCPIP (H-6): sc-515275. Western blot analysis of MCPIP expression in Raji (**A**), Hep G2 (**B**), NIH/3T3 (**C**), A-431 (**D**) and Caki-1 (**E**) whole cell lysates and human liver tissue extract (**F**).



MCPIP (H-6): sc-515275. Western blot analysis of MCPIP expression in 3T3-L1 (**A**), Caki-1 (**B**) and RAW 264.7 (**C**) whole cell lysates. Detection reagent used: m-IgGκ BP-HRP: sc-516102.

SELECT PRODUCT CITATIONS

1. Happel, C., et al. 2016. Virus-mediated alterations in miRNA factors and degradation of viral miRNAs by MCPIP1. PLoS Biol. 14: e2000998.
2. Qian, L., et al. 2018. MCPIP1 is a positive regulator of type I interferons antiviral activity. Biochem. Biophys. Res. Commun. 498: 891-897.
3. Yi, Q., et al. 2019. Minocycline protects against myocardial ischemia/reperfusion injury in rats by upregulating MCPIP1 to inhibit NFκB activation. Acta Pharmacol. Sin. 40: 1019-1028.
4. Ren, Z., et al. 2019. MiR-421 promotes the development of osteosarcoma by regulating MCPIP1 expression. Cancer Biol. Ther. 12: 1-10.
5. Chen, G., et al. 2020. Monocyte chemotactic protein-1 regulates proliferation and contractility of human bladder smooth muscle cells under hydrostatic pressure. J. Interferon Cytokine Res. 40: 245-253.
6. Chen, X., et al. 2020. CX3CL1/CX3CR1 axis attenuates early brain injury via promoting the delivery of exosomal microRNA-124 from neuron to microglia after subarachnoid hemorrhage. J. Neuroinflammation 17: 209.
7. Hou, Y., et al. 2021. YTHDC1-mediated augmentation of miR-30d in repressing pancreatic tumorigenesis via attenuation of RUNX1-induced transcriptional activation of Warburg effect. Cell Death Differ. 28: 3105-3124.

RESEARCH USE

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