SANTA CRUZ BIOTECHNOLOGY, INC.

MCPIP (P-12): sc-136750

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 (P-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MCPIP 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.

Blocking peptide available for competition studies, sc-136750 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

MCPIP (P-12) is recommended for detection of MCPIP 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), immunohistochemistry (including paraffin-embedded sections) (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.

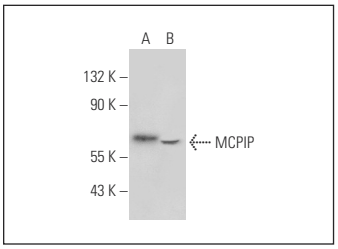
Molecular Weight of MCPIP: 66 kDa.

Positive Controls: human fetal brain tissue extract or Hep G2 cell lysate: sc-2227.

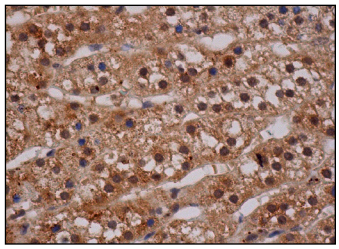
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



MCPIP (P-12): sc-136750. Western blot analysis of MCPIP expression in human fetal brain tissue extract (**A**) and Hep G2 whole cell lysate (**B**).



MCPIP (P-12): sc-136750. Immunoperoxidase staining of formalin fixed, paraffin-embedded human adrenal gland tissue showing nuclear and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

1. Qi, D., et al. 2011. Monocyte chemotactic protein-induced protein 1 (MCPIP1) suppresses stress granule formation and determines apoptosis under stress. J. Biol. Chem. 286: 41692-41700.
2. Huang, S., et al. 2012. The putative tumor suppressor Zc3h12d modulates toll-like receptor signaling in macrophages. Cell. Signal. 24: 569-576.
3. Li, M., et al. 2012. MCPIP1 down-regulates IL-2 expression through an ARE-independent pathway. PLoS ONE 7: e49841.

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.