SANTA CRUZ BIOTECHNOLOGY, INC.

MSMP (C-15): sc-248009



BACKGROUND

MSMP (microseminoprotein, prostate associated), also known as PSMP (prostate-associated microseminoprotein) or PC3-secreted microprotein, is a 139 amino acid secreted protein that belongs to the β -microseminoprotein family. Expressed in trachea and testis, MSMP is found at high levels in human prostate cancer cell line PC-3 and is implicated in prostate cancer tumorigenesis. The gene encoding MSMP maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

REFERENCES

- Zhuang, H., Kosboth, M., Lee, P., Rice, A., Driscoll, D.J., Zori, R., Narain, S., Lyons, R., Satoh, M., Sobel, E. and Reeves, W.H. 2006. Lupus-like disease and high interferon levels corresponding to trisomy of the type I interferon cluster on chromosome 9p. Arthritis Rheum. 54: 1573-1579.
- Valtonen-Andre, C., Bjartell, A., Hellsten, R., Lilja, H., Härkönen, P. and Lundwall, A. 2007. A highly conserved protein secreted by the prostate cancer cell line PC-3 is expressed in benign and malignant prostate tissue. Biol. Chem. 388: 289-295.
- Burmeister, T., Schwartz, S., Taubald, A., Jost, E., Lipp, T., Schneller, F., Diedrich, H., Thomssen, H., Mey, U.J., Eucker, J., Rieder, H., Gökbuget, N., Hoelzer, D. and Thiel, E. 2007. Atypical BCR-ABL mRNA transcripts in adult acute lymphoblastic leukemia. Haematologica 92: 1699-1702.
- Cottin, V., Dupuis-Girod, S., Lesca, G. and Cordier, J.F. 2007. Pulmonary vascular manifestations of hereditary hemorrhagic telangiectasia (Rendu-Osler disease). Respiration 74: 361-378.
- Zeitz, M.J., Marella, N.V., Malyavantham, K.S., Goetze, S., Bode, J., Raska, I. and Berezney, R. 2009. Organization of the amplified type I interferon gene cluster and associated chromosome regions in the interphase nucleus of human osteosarcoma cells. Chromosome Res. 17: 305-319.
- Gold-von Simson, G., Goldberg, J.D., Rolnitzky, L.M., Mull, J., Leyne, M., Voustianiouk, A., Slaugenhaupt, S.A. and Axelrod, F.B. 2009. Kinetin in familial dysautonomia carriers: implications for a new therapeutic strategy targeting mRNA splicing. Pediatr. Res. 65: 341-346.

CHROMOSOMAL LOCATION

Genetic locus: MSMP (human) mapping to 9p13.3; Msmp (mouse) mapping to 4 B1.

SOURCE

MSMP (C-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of MSMP 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 lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-248009 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

MSMP (C-15) is recommended for detection of MSMP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

MSMP (C-15) is also recommended for detection of MSMP in additional species, including canine and bovine.

Suitable for use as control antibody for MSMP siRNA (m): sc-151500, MSMP shRNA Plasmid (m): sc-151500-SH and MSMP shRNA (m) Lentiviral Particles: sc-151500-V.

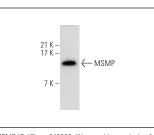
Molecular Weight of MSMP: 15 kDa.

Positive Controls: PC-3 cell lysate: sc-2220.

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.

DATA



MSMP (C-15): sc-248009. Western blot analysis of MSMP expression in PC-3 whole cell lysate.

RESEARCH USE

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