SANTA CRUZ BIOTECHNOLOGY, INC.

MPPED1 (D-15): sc-86747

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The Power to Question

BACKGROUND

MPPED1 (metallophosphoesterase domain containing 1), also known as C22orf1 or FAM1A, is a 326 amino acid protein that is expressed predominately in adult brain and may be involved in the development and function of the central nervous system. The gene encoding MPPED1 maps to human chromosome 22, which houses over 500 genes and is the second smallest human chromosome. Mutations in several of the genes that map to chromosome 22 are involved in the development of Phelan-McDermid syndrome, Neurofibromatosis type 2, autism and schizophrenia. Additionally, translocations between chromosomes 9 and 22 may lead to the formation of the Philadelphia Chromosome and the subsequent production of the novel fusion protein Bcr-Abl, a potent cell proliferation activator found in several types of leukemias.

REFERENCES

1. Schwartz, F. and Ota, T. 1997. The 239AB gene on chromosome 22: a novel member of an ancient gene family. Gene 194: 57-62.
2. Online Mendelian Inheritance in Man, OMIM™. 1998. Johns Hopkins University, Baltimore, MD. MIM Number: 602112. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Schwab, S.G. and Wildenauer, D.B. 1999. Chromosome 22 workshop report. Am. J. Med. Genet. 88: 276-278.
4. Matsuda, A., Suzuki, Y., Honda, G., Muramatsu, S., Matsuzaki, O., Nagano, Y., Doi, T., Shimotohno, K., Harada, T., Nishida, E., Hayashi, H. and Sugano, S. 2003. Large-scale identification and characterization of human genes that activate NFκB and MAPK signaling pathways. Oncogene 22: 3307-3318.

CHROMOSOMAL LOCATION

Genetic locus: MPPED1 (human) mapping to 22q13.2; Mpped1 (mouse) mapping to 15 E2.

SOURCE

MPPED1 (D-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of MPPED1 of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86747 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.

RESEARCH USE

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

APPLICATIONS

MPPED1 (D-15) is recommended for detection of MPPED1 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

MPPED1 (D-15) is also recommended for detection of MPPED1 in additional species, including equine, canine, bovine and avian.

Suitable for use as control antibody for MPPED1 siRNA (h): sc-75820, MPPED1 siRNA (m): sc-149540, MPPED1 shRNA Plasmid (h): sc-75820-SH, MPPED1 shRNA Plasmid (m): sc-149540-SH, MPPED1 shRNA (h) Lentiviral Particles: sc-75820-V and MPPED1 shRNA (m) Lentiviral Particles: sc-149540-V.

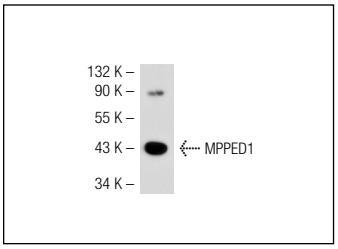
Molecular Weight of MPPED1: 37 kDa.

Positive Controls: mouse brain extract: sc-2253.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



MPPED1 (D-15): sc-86747. Western blot analysis of MPPED1 expression in mouse brain tissue extract.

PROTOCOLS

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

MONOS Satisfaction Guaranteed

Try **MPPED1 (D-2): sc-398972**, our highly recommended monoclonal alternative to MPPED1 (D-15).