SANTA CRUZ BIOTECHNOLOGY, INC.

PPM1N (S-19): sc-242844



BACKGROUND

PPM1N (protein phosphatase, Mg²⁺/Mn²⁺ dependent, 1N [putative]), also known as probable protein phosphatase 1N, is a 430 amino acid protein that contains one PP2C-like domain and belongs to the PP2C family. Conserved in chimpanzee, dog, mouse and rat, PPM1N exists as three alternatively spliced isoforms and participates in hydrolase activity and phosphoprotein phosphatase activity. Binding two magnesium or manganese ions per subunit, PPM1N also participates in magnesium and manganese ion binding. The gene that encodes PPM1N maps to human chromosome 19, which consists of approximately 63 million bases and makes up over 2% of human genomic DNA. Chromosome 19 contains the greatest gene density of the human chromosomes and is the genetic home for a number of immunoglobulin superfamily members, including killer cell and leukocyte Ig-like receptors, ICAMs, the CEACAM and PSG families, and Fc α receptors. Key genes for eye color and hair color also map to chromosome 19.

REFERENCES

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- Vikelis, M., et al. 2007. A novel CADASIL-causing mutation in a stroke patient. Swiss Med. Wkly. 137: 323-325.
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CHROMOSOMAL LOCATION

Genetic locus: PPM1N (human) mapping to 19q13.32; Ppm1n (mouse) mapping to 7 A3.

SOURCE

PPM1N (S-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PPM1N of human origin.

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, NEW 2011 Goat hue P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PPM1N (S-19) is recommended for detection of PPM1N 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).

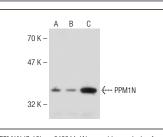
PPM1N (S-19) is also recommended for detection of PPM1N in additional species, including canine.

Suitable for use as control antibody for PPM1N siRNA (m): sc-141930, PPM1N shRNA Plasmid (m): sc-141930-SH and PPM1N shRNA (m) Lentiviral Particles: sc-141930-V.

Molecular Weight of PPM1N isoforms 1/2/3: 46/37/12 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or K-562 whole cell lysate: sc-2203.

DATA



PPM1N (S-19): sc-242844. Western blot analysis of PPM1N expression in HeLa (A), Jurkat (B) and K-562 (C) whole cell lysates.

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.

PROTOCOLS

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