

# PPM1N (C-19): sc-242845

## BACKGROUND

PPM1N (protein phosphatase, Mg<sup>2+</sup>/Mn<sup>2+</sup> 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 $\alpha$  receptors. Key genes for eye color and hair color also map to chromosome 19.

## REFERENCES

- Zimmermann, W., et al. 1988. Chromosomal localization of the carcinoembryonic antigen gene family and differential expression in various tumors. *Cancer Res.* 48: 2550-2554.
- LaPoint, S.F., et al. 2000. Cerebral autosomal dominant arteriopathy with subcortical infarcts and leukoencephalopathy (CADASIL). *Adv. Anat. Pathol.* 7: 307-321.
- Trettel, F., et al. 2000. A fine physical map of the CACNA1A gene region on 19p13.1-p13.2 chromosome. *Gene* 241: 45-50.
- Buchet-Poyau, K., et al. 2002. Search for the second Peutz-Jeghers syndrome locus: exclusion of the STK13, PRKCG, KLK10, and PSCD2 genes on chromosome 19 and the STK11IP gene on chromosome 2. *Cytogenet. Genome Res.* 97: 171-178.
- Moodie, S.J., et al. 2002. Analysis of candidate genes on chromosome 19 in coeliac disease: an association study of the KIR and LILR gene clusters. *Eur. J. Immunogenet.* 29: 287-291.
- Grimwood, J., et al. 2004. The DNA sequence and biology of human chromosome 19. *Nature* 428: 529-535.
- Parham, P. 2005. Immunogenetics of killer cell immunoglobulin-like receptors. *Mol. Immunol.* 42: 459-462.
- Vikelis, M., et al. 2007. A novel CADASIL-causing mutation in a stroke patient. *Swiss Med. Wkly.* 137: 323-325.
- Schraders, M., et al. 2008. Integrated genomic and expression profiling in mantle cell lymphoma: identification of gene-dosage regulated candidate genes. *Br. J. Haematol.* 143: 210-221.

## CHROMOSOMAL LOCATION

Genetic locus: FLJ40125 (human) mapping to 19q13.32.

## STORAGE

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

## SOURCE

FLJ40125 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of FLJ40125 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, NEW 2011 Goat hue P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

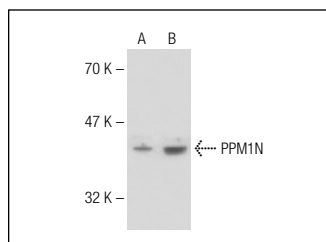
## APPLICATIONS

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

Molecular Weight of FLJ40125 isoforms: 6/37/12 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Jurkat whole cell lysate: sc-2204 or Hep G2 cell lysate: sc-2227.

## DATA



PPM1N (C-19): sc-242845. Western blot analysis of PPM1N expression in HeLa (A) and Hep G2 (B) whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.