

# PP2C $\gamma$ (7): sc-136320

## BACKGROUND

Eukaryotic protein phosphorylation and dephosphorylation on serine and threonine residues regulates numerous cell functions, including division, homeostasis and apoptosis. A group of proteins that play a major role in this process are the serine/threonine protein phosphatases. Protein phosphatase (PP) holoenzyme is a trimeric complex that contains a regulatory subunit, a variable subunit and a catalytic subunit. PP2C family members are negative regulators of cell stress response pathways. The PP2C $\gamma$  enzyme localizes to the cytoplasm and is widely expressed, with most abundant expression detected in the testis, skeletal muscle, and heart. It is necessary for the dephosphorylation of Pre-mRNA splicing factors, which is an important process for the formation of the functional spliceosome.

## REFERENCES

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2. Murray, M.V., Kobayashi, R. and Krainer, A.R. 1999. The type 2C Ser/Thr phosphatase PP2C $\gamma$  is a pre-mRNA splicing factor. *Genes Dev.* 13: 87-97.
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4. Gerhard, D.S., Wagner, L., Feingold, E.A., Shenmen, C.M., Grouse, L.H., Schuler, G., Klein, S.L., Old, S., Rasooly, R., Good, P., Guyer, M., Peck, A.M., Derge, J.G., Lipman, D., Collins, F.S., Jang, W., Sherry, S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). *Genome Res.* 14: 2121-2127.
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## CHROMOSOMAL LOCATION

Genetic locus: PPM1G (human) mapping to 2p23.3; Ppm1g (mouse) mapping to 5 B1.

## SOURCE

PP2C $\gamma$  (7) is a mouse monoclonal antibody raised against amino acids 9-122 of PP2C $\gamma$  of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

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

## APPLICATIONS

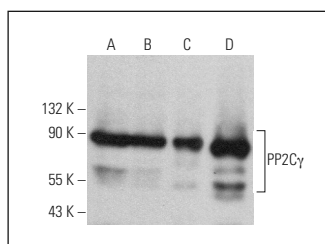
PP2C $\gamma$  (7) is recommended for detection of PP2C $\gamma$  of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for PP2C $\gamma$  siRNA (h): sc-61388, PP2C $\gamma$  siRNA (m): sc-61390, PP2C $\gamma$  shRNA Plasmid (h): sc-61388-SH, PP2C $\gamma$  shRNA Plasmid (m): sc-61390-SH, PP2C $\gamma$  shRNA (h) Lentiviral Particles: sc-61388-V and PP2C $\gamma$  shRNA (m) Lentiviral Particles: sc-61390-V.

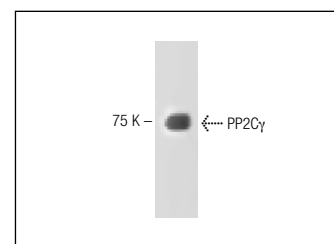
Molecular Weight of PP2C $\gamma$ : 68 kDa.

Positive Controls: A549 cell lysate: sc-2413, RAW 264.7 whole cell lysate: sc-2211 or Jurkat whole cell lysate: sc-2204.

## DATA



PP2C $\gamma$  (7): sc-136320. Western blot analysis of PP2C $\gamma$  expression in Jurkat (A), A549 (B), WiDr (C) and RAW 264.7 (D) whole cell lysates.



PP2C $\gamma$  (7): sc-136320. Western blot analysis of PP2C $\gamma$  expression in RSV-313 whole cell lysate.

## 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) for detailed protocols and support products.