

# PP2C $\beta$ (h2): 293T Lysate: sc-116891

## 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. Families of PP catalytic subunits include PP1 (PP1 $\alpha$ ,  $\beta$  and  $\gamma$ ), PP2A ( $\alpha$  and  $\beta$ ), PP2B (calcineurin, PP2B $\alpha$ ,  $\beta$  and  $\gamma$ ), PP2C ( $\alpha$ ,  $\beta$ ,  $\gamma$ ,  $\eta$  and Wip1), PP4 (PPX) and PP5 (PPT). PP2C family members are negative regulators of cell stress response pathways. The PP2C $\beta$  enzyme has broad specificity and is highly expressed in the heart and skeletal muscle. It may be involved in cell cycle control as it dephosphorylates the cyclin-dependent kinases (CDKs), CDK2 and CDK6, *in vitro*. Overexpression of PP2C $\beta$  can cause cell growth arrest or cell death.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PPM1B (human) mapping to 2p21.

## PRODUCT

PP2C $\beta$  (h2): 293T Lysate represents a lysate of human PP2C $\beta$  transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## PROTOCOLS

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

## APPLICATIONS

PP2C $\beta$  (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive PP2C $\beta$  antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

## RESEARCH USE

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