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IPP-2 (m2): 293T Lysate: sc-121098

BACKGROUND

Two inhibitors of protein phosphatase 1 (PP1) include the phosphatase inhibitor 1 (IPP-1) and phosphatase inhibitor 2 (IPP-2). IPP-2, also known as I-2, interacts with the catalytic subunit of PP1 to form the heterodimer PP1I. The PP1I complex is present in the cytosol of cells in a broad range of vertebrate and invertebrate species. Although the heterodimer itself is inactive, a reversible phosphorylation of IPP-2 at Thr 72 by glycogen-synthase-kinase (GSK3) initiates activation of the heterodimer complex *in vitro*. Phosphorylation of IPP-2 by casein kinase-II at Ser 86, Ser 120, and Ser 121 enhances the rate of phosphorylation by GSK3 at Thr 72 and effectively activates the heterodimer complex. Besides moderating PP1 activity, IPP-2 may play a role as a chaperone for the correct folding of PP1. The gene for human IPP-2 maps to chromosome 6 in the major histocompatibility complex region.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ppp1r2 (mouse) mapping to 16 B2.

PRODUCT

IPP-2 (m2): 293T Lysate represents a lysate of mouse IPP-2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

IPP-2 (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive IPP-2 antibodies. Recommended use: 10-20 µl per lane.

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

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.

RESEARCH USE

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

PROTOCOLS

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