

# Wip1 (C-18): sc-69130

## BACKGROUND

Several major serine/threonine protein phosphatases have been identified in eukaryotic cells. These include protein phosphatase families 1, 2A, 2B, 2C, X and Y (PP-1, PP-2A, PP-2B, PP-2C, PP-X and PP-Y). These enzymes can be distinguished by their action on phosphorylase kinase and their sensitivity to certain activators and inhibitors. Wip1 (wildtype p53-induced phosphatase or PPM1D), a protein identified in the p53 DNA response pathway, is a member of the PP-2C family. Wip1 is a serine/threonine protein phosphatase which selectively inactivates p38 MAPK and dephosphorylates the ATM/ATR targets, Chk1 and p53. Wip1 is ubiquitously expressed but is present at very high levels in testis. Deletion of Wip1 results in a reduction of T and B cell function and compromised cell division, rendering cells resistant to becoming cancerous and slowing tumor development.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: PPM1D (human) mapping to 17q23.2; Ppm1d (mouse) mapping to 11 C.

## RESEARCH USE

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

## SOURCE

Wip1 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Wip1 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, sc-69130 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Wip1 (C-18) is recommended for detection of Wip1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Wip1 (C-18) is also recommended for detection of Wip1 in additional species, including canine.

Suitable for use as control antibody for Wip1 siRNA (h): sc-39205, Wip1 siRNA (m): sc-39206, Wip1 shRNA Plasmid (h): sc-39205-SH, Wip1 shRNA Plasmid (m): sc-39206-SH, Wip1 shRNA (h) Lentiviral Particles: sc-39205-V and Wip1 shRNA (m) Lentiviral Particles: sc-39206-V.

Molecular Weight of Wip1: 64 kDa.

Positive Controls: F9 cell lysate: sc-2245.

## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

## STORAGE

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



Try **Wip1 (F-10): sc-376257**, our highly recommended monoclonal alternative to Wip1 (C-18). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **Wip1 (F-10): sc-376257**.