**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.

**CHROMOSOMAL LOCATION**

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

**SOURCE**

Wip1 (H-300) is a rabbit polyclonal antibody raised against amino acids 306-605 mapping at the C-terminus 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.

**APPLICATIONS**

Wip1 (H-300) 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), 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), immunohistochemistry (including paraffin-embedded sections) (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 (H-300) is also recommended for detection of Wip1 in additional species, including equine, canine, bovine and porcine.

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

**RESEARCH USE**

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

**PROTOCOLS**

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

**STORAGE**

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

**DATA**

![Western blot analysis of Wip1 expression in F9 whole cell lysate.](image)

![Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing cytoplasmic staining of glandular cells at low (A) and high (B) magnification. Kindly provided by The Swedish Human Protein Atlas (HPA) program.](image)

**SELECT PRODUCT CITATIONS**


**MONOS Satisfaction Guaranteed**

Try Wip1 (F-10): sc-376257, our highly recommended monoclonal alternative to Wip1 (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see Wip1 (F-10): sc-376257.