

PPM1D Antibody (Center)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13875C

Specification

PPM1D Antibody (Center) - Product Information

Application	WB,E
Primary Accession	O15297
Other Accession	O9OZ67 , NP_003611.1
Reactivity	Human
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	66675
Antigen Region	183-212

PPM1D Antibody (Center) - Additional Information

Gene ID 8493

Other Names

Protein phosphatase 1D, Protein phosphatase 2C isoform delta, PP2C-delta, Protein phosphatase magnesium-dependent 1 delta, p53-induced protein phosphatase 1, PPM1D, WIP1

Target/Specificity

This PPM1D antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 183-212 amino acids from the Central region of human PPM1D.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PPM1D Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

PPM1D Antibody (Center) - Protein Information

Name PPM1D

Synonyms WIP1

Function Involved in the negative regulation of p53 expression (PubMed:[23242139](#)). Required for the relief of p53-dependent checkpoint mediated cell cycle arrest. Binds to and dephosphorylates 'Ser-15' of TP53 and 'Ser-345' of CHEK1 which contributes to the functional inactivation of these proteins (PubMed:[15870257](#), PubMed:[16311512](#)). Mediates MAPK14 dephosphorylation and inactivation (PubMed:[21283629](#)). Is also an important regulator of global heterochromatin silencing and critical in maintaining genome integrity (By similarity).

Cellular Location

Nucleus. Cytoplasm, cytosol

Tissue Location

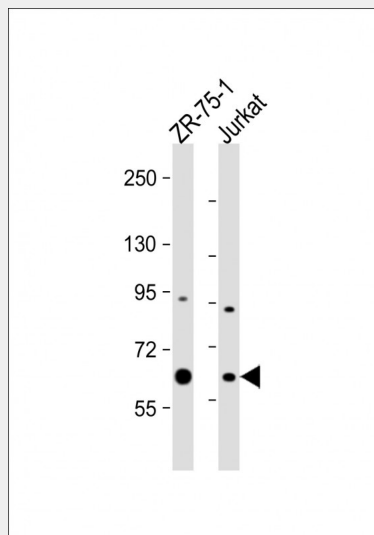
Expressed in fetal and adult brain. Also detected in fetal liver and skeletal muscle, but not in their adult counterparts.

PPM1D Antibody (Center) - Protocols

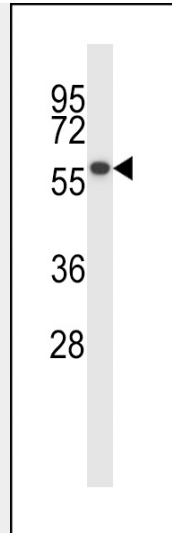
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PPM1D Antibody (Center) - Images



All lanes : Anti-PPM1D Antibody (Center) at 1:1000 dilution Lane 1: ZR-75-1 whole cell lysate Lane 2: Jurkat whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 67 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



PPM1D Antibody (Center) (Cat. #AP13875c) western blot analysis in HeLa cell line lysates (35ug/lane). This demonstrates the PPM1D antibody detected the PPM1D protein (arrow).

PPM1D Antibody (Center) - Background

The protein encoded by this gene is a member of the PP2C family of Ser/Thr protein phosphatases. PP2C family members are known to be negative regulators of cell stress response pathways. The expression of this gene is induced in a p53-dependent manner in response to various environmental stresses. While being induced by tumor suppressor protein TP53/p53, this phosphatase negatively regulates the activity of p38 MAP kinase, MAPK/p38, through which it reduces the phosphorylation of p53, and in turn suppresses p53-mediated transcription and apoptosis. This phosphatase thus mediates a feedback regulation of p38-p53 signaling that contributes to growth inhibition and the suppression of stress induced apoptosis. This gene is located in a chromosomal region known to be amplified in breast cancer. The amplification of this gene has been detected in both breast cancer cell line and primary breast tumors, which suggests a role of this gene in cancer development.

PPM1D Antibody (Center) - References

Zhang, X., et al. *Cancer Res.* 70(18):7176-7186(2010)
Rose, J.E., et al. *Mol. Med.* 16 (7-8), 247-253 (2010) :
Moon, S.H., et al. *J. Biol. Chem.* 285(17):12935-12947(2010)
Macurek, L., et al. *Oncogene* 29(15):2281-2291(2010)
Yang, D.H., et al. *Zhonghua Yi Xue Za Zhi* 90(8):519-522(2010)

PPM1D Antibody (Center) - Citations

- [Protein phosphatase 2C6/Wip1 regulates phospho-p90RSK2 activity in lesional psoriatic skin.](#)