

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

**Specification**

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**PPM1D Antibody (Center) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O15297</a>
Other Accession	<a href="#">O9OZ67</a> , <a href="#">NP_003611.1</a>
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

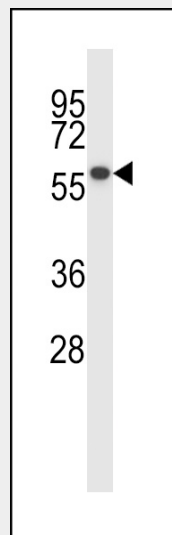
Expressed in fetal and adult brain. Also detected in fetal liver and skeletal muscle, but not in their adult counterparts.

## PPM1D Antibody (Center) - Protocols

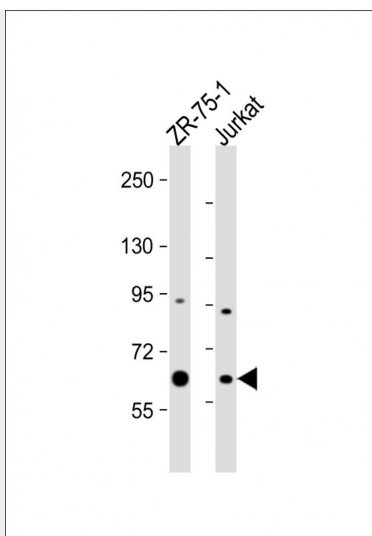
Provided below are standard protocols that you may find useful for product applications.

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

## PPM1D Antibody (Center) - Images



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).



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  $\mu$ g 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) - 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.](#)