



## Rabbit Anti-PPM1D antibody

SL2447R

<b>Product Name:</b>	PPM1D
<b>Chinese Name:</b>	原癌基因WIP1抗体
<b>Alias:</b>	WPP-DOMAIN INTERACTING PROTEIN 1; EC 3.1.3.16; p53 induced protein phosphatase 1; PP2C delta; PP2CD; protein phosphatase 1D magnesium-dependent delta isoform; Protein phosphatase 2C delta isoform; Protein phosphatase 2C isoform delta; Protein phosphatase magnesium dependent 1 delta; WIP 1; WIP1; AV338790; PPM1D; PPM1D_HUMAN.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,Chicken,Dog,Pig,Cow,
<b>Applications:</b>	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	67kDa
<b>Cellular localization:</b>	The nucleus
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human PPM1D:201-300/605
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</b>	PPM1D (Wip) is a serine/threonine phosphatase implicated in cell cycle control, spermatogenesis, and lymphoid cell function. The predicted 605-amino acid PPM1D protein contains 2 putative nuclear localization signals and 3 regions conserved in

serine/threonine PP2C phosphatases, as well as characteristics of a type 2C phosphatase, including magnesium dependence and relative insensitivity to okadaic acid. PPM1D expression is induced in response to ionizing radiation in a p53-dependent manner. The accumulation of PPM1D mRNA following ionizing radiation is rapid and transient, and PPM1D protein is localized to the nucleus. PPM1D may contribute to growth inhibitory pathways activated in response to DNA damage in a p53-dependent manner. PPM1D inhibits phosphorylation of the p38 mitogen-activated (MAP)kinase protein. Through p38 MAPK, PPM1D modulates the CDKN2A tumor-suppressor locus. This gene is located in a chromosomal region known to be amplified in breast cancer, (located at 17q22-q23), is amplified in human breast tumor cell lines and in approximately 11% of primary breast tumors, and appears to lead to cell transformation by abrogating p53 tumor suppressor activity. Inactivation of the p38 MAPK through PPM1D overexpression resulting from PPM1D amplification may contribute to the development of human cancers by suppressing p53 activation. PPM1D null mice have increased susceptibility to pathogens and reduced male fertility and longevity.

**Function:**

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.

**Subunit:**

Interacts with CHEK1 and CHEK2; dephosphorylates them.

**Similarity:**

Belongs to the PP2C family.  
Contains 1 PP2C-like domain.

**SWISS:**

O15297

**Gene ID:**

4893

**Database links:**

[Entrez Gene: 8493](#) Human

[Entrez Gene: 53892](#) Mouse

[Entrez Gene: 380383](#) Xenopus laevis

[Entrez Gene: 394065](#) Zebrafish

[Omim: 605100](#) Human

[SwissProt: O15297](#) Human

[SwissProt: Q5RI25](#) Mouse

[SwissProt: Q9QZ67](#) Mouse

[Unigene: 286073](#) Human

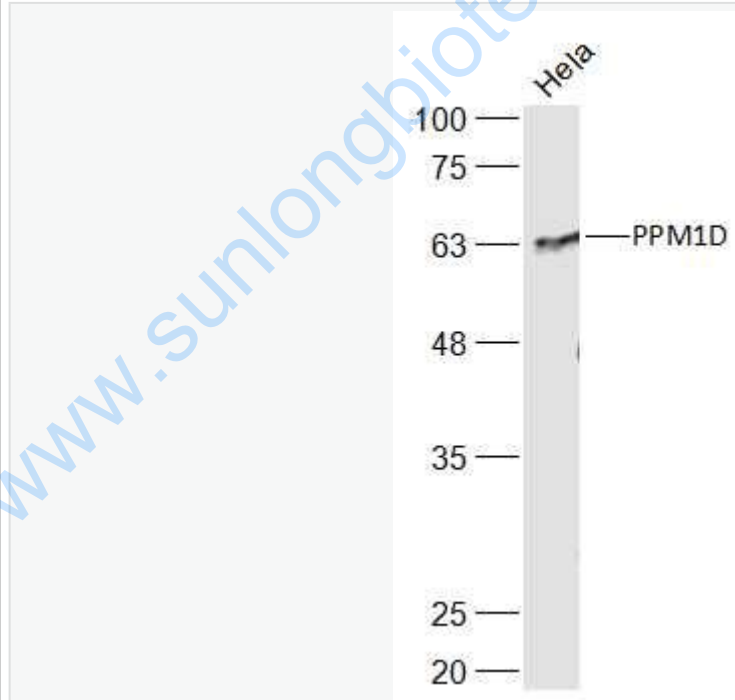
[Unigene: 45609](#) Mouse

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Wip1是一种镁依赖性的丝氨酸/苏氨酸蛋白磷酸酶,属于蛋白磷酸酶2C家族。Wip1通过p53诱导在癌症的发生、发展中起到重要作用,在多种人类癌细胞中都已发现Wip1的大量扩增和过量存在。

Picture:



Sample:

HeLa(Human) Cell Lysate at 30 ug

Primary: Anti-PPM1D ? (SL2447R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 67 kD

Observed band size: 67 kD

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