

Rabbit PPM1D/WIP1 Polyclonal Antibody | anti-PPM1D antibody

Anti-PPM1D/WIP1 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125433	Rabbit	Human, Mouse, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Western Blot

PRODUCT SYNONYMS

PPM1D/WIP1; Polyclonal Antibody; Anti-PPM1D/WIP1 Antibody; Protein phosphatase 1D; Protein phosphatase 2C isoform delta; PP2C-delta; Protein phosphatase magnesium-dependent 1 delta; p53-induced protein phosphatase 1; PPM1D; WIP1; anti-PPM1D antibody

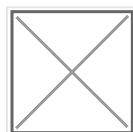
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	No cross reactivity with other proteins.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Sequence Length	605
Applicable Applications for anti-PPM1D antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), WB (Western Blot)
Immunogen	E Coli-derived human PPM1D/WIP1 recombinant protein (Position: R18-C605).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen store at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES


WB (Western Blot)

Figure 1. Western blot analysis of PPM1D using anti-PPM1D antibody.


IF (Immunofluorescence)

FCM/FACS (Flow Cytometry)

ADDITIONAL INFORMATION

Related Product Information for anti-PPM1D antibody	Description: Rabbit IgG polyclonal antibody for PPM1D/WIP1 detection. Tested with WB, ICC/IF, FCM, Direct ELISA in Human; Mouse; Rat. Background: Protein phosphatase 1D is an enzyme that in humans is encoded by the PPM1D gene. It is mapped to 17q23.2. 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.
References	1. Jansen, S., Geuer, S., Pfundt, R., Brough, R., Ghongane, P., Herkert, J. C., Marco, E. J., Willemsen, M. H., Kleefstra, T., Hannibal, M., Shieh, J. T., Lynch, S. A., and 18 others. De novo truncating mutations in the last and penultimate exons of PPM1D cause an intellectual disability syndrome. Am. J. Hum. Genet. 100: 650-658, 2017. 2. Li, J., Yang, Y., Peng, Y., Austin, R. J., van Eyndhoven, W. G., Nguyen, K. C. Q., Gabriele, T., McCurrach, M. E., Marks, J. R., Hoey, T., Lowe, S. W., Powers, S. Oncogenic properties of PPM1D located within a breast cancer amplification epicenter at 17q23. Nature Genet. 31: 133-134, 2002. 3. Lu, X., Nannenga, B., Donehower, L. A. PPM1D dephosphorylates Chk1 and p53 and abrogates cell cycle checkpoints. Genes Dev. 19: 1162-1174, 2005.

NCBI AND UNIPROT INFORMATION

NCBI GI #	4505997
NCBI GeneID	8493
NCBI Accession #	NP_003611.1
NCBI GenBank Nucleotide #	NP_003611.1
UniProt Accession #	O15297
NCBI Official Full Name	protein phosphatase 1D
NCBI Official Synonym Full Names	protein phosphatase, Mg2+/Mn2+ dependent 1D
NCBI Official Symbol	PPM1D
NCBI Official Synonym Symbols	JDVS; WIP1; IDDGIP; PP2C-DELTA
NCBI Protein Information	protein phosphatase 1D
UniProt Protein Name	Protein phosphatase 1D
UniProt Gene Name	PPM1D
UniProt Synonym Gene Names	WIP1; PP2C-delta
UniProt Entry Name	PPM1D_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.