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PPM1D Antibody
Catalog # ASC11875

Specification

PPM1D Antibody - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q8IVR6
Other Accession	NP_003611, 4505997
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 67 kDa** **Observed: 68 kDa KDa**
Application Notes	**PPM1D antibody can be used for detection of PPM1D by Western blot at 1 - 2 µg/ml. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.**

PPM1D Antibody - Additional Information

Gene ID **8493**

Target/Specificity
PPM1D; PPM1D antibody is human, mouse and rat reactive. At least two isoforms of PPM1D are known to exist; this antibody will only detect the larger isoform.

Reconstitution & Storage
PPM1D antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
PPM1D Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PPM1D Antibody - Protein Information

PPM1D Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

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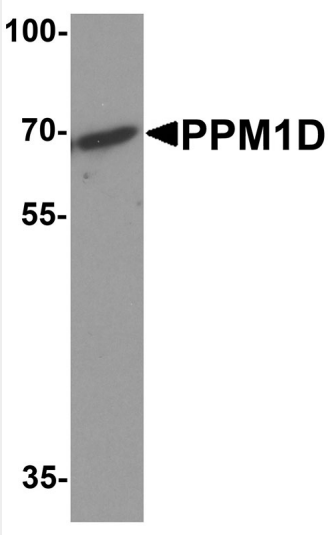
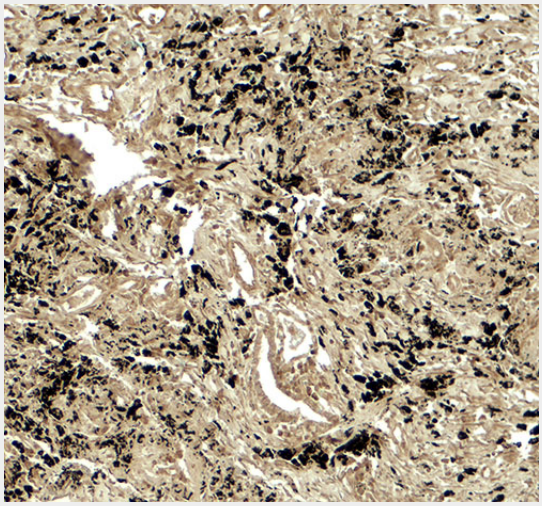
- Flow Cytomety
- Cell Culture

PPM1D Antibody - Images



Western blot analysis of PPM1D in 3T3 cell lysate with PPM1D antibody at 1 µg/ml.



Immunohistochemistry of PPM1D in human lung carcinoma tissue with PPM1D antibody at 5 µg/ml.

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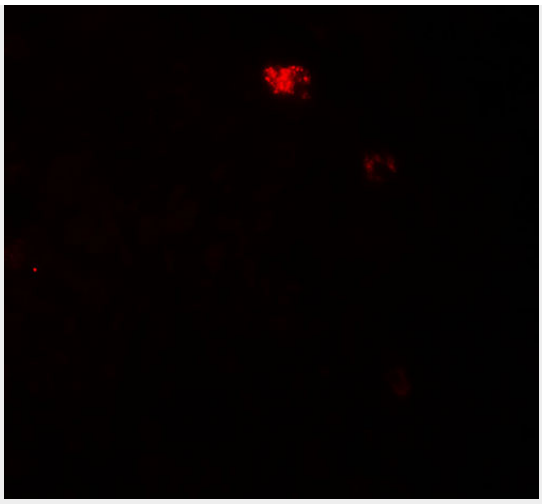

Immunofluorescence of PPM1D in human lung carcinoma tissue with PPM1D antibody at 20 µg/ml.

PPM1D Antibody - Background

Wild-type p53 induced phosphatase 1 (WIP1) / protein phosphatase magnesium-dependent 1 delta (PPM1D), a protein identified in the p53 DNA response pathway, is a member of the PP2C family of serine/threonine protein phosphatases which selectively inactivates p38 MAPK and dephosphorylates the ATM/ATR targets, Chk1 and p53 (1,2). Studies have shown that it is overexpressed in human cancers and is involved in the regulation of multiple DNA damage signaling pathways (2,3). PPM1D deletion results in a reduction of T and B cell function and compromised cell division, rendering cells resistant to becoming cancerous and slowing tumor development (4,5).

PPM1D Antibody - References

Fiscella M, Zhang H, Fan S, et al. Wip1, a novel human protein phosphatase that is induced in response to ionizing radiation in a p53-dependent manner. Proc. Natl. Acad. Sci. USA. 1997; 94:6048-53.
Zhu YH and Bulavin DV. Wip1-dependent signaling pathways in health and diseases. Prog. Mol. Biol. Transl. Sci. 2012; 106:307-25.
Lu X, Nguyen TA, Moon SH, et al. The type 2C phosphatase Wip1: an oncogenic regulator of tumor suppressor and DNA damage response pathways. Cancer Metastasis Rev. 2008; 27:123-35.
Liang C, Guo E, Lu S, et al. Over-expression of wild-type p53-induced phosphatase 1 confers poor prognosis of patients with gliomas. Brain Res. 2012; 1444:65-75.