

PPM1B Antibody (monoclonal) (M01)**Mouse monoclonal antibody raised against a full length recombinant PPM1B.****Catalog # AT3406a****Specification**

PPM1B Antibody (monoclonal) (M01) - Product Information

Application	WB, IF, IP, E
Primary Accession	O75688
Other Accession	BC012002
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 kappa
Calculated MW	52643

PPM1B Antibody (monoclonal) (M01) - Additional Information**Gene ID** 5495**Other Names**

Protein phosphatase 1B, Protein phosphatase 2C isoform beta, PP2C-beta, PPM1B, PP2CB

Target/Specificity

PPM1B (AAH12002, 1 a.a. ~ 192 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Dilution

WB~~1:500~1000

IF~~1:50~200

IP~~N/A

E~~N/A

Format

Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Precautions

PPM1B Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

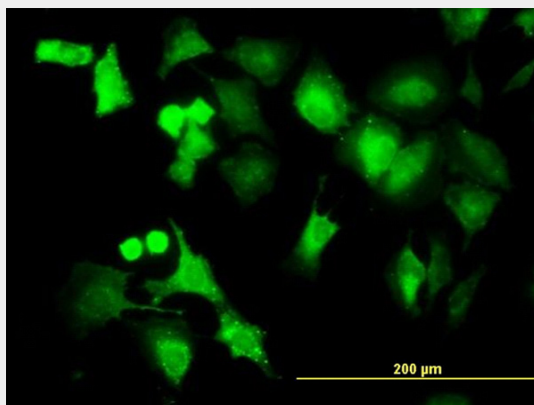
PPM1B Antibody (monoclonal) (M01) - Protocols

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

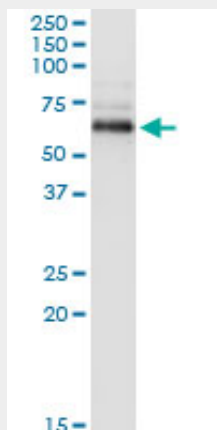
- [Western Blot](#)

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

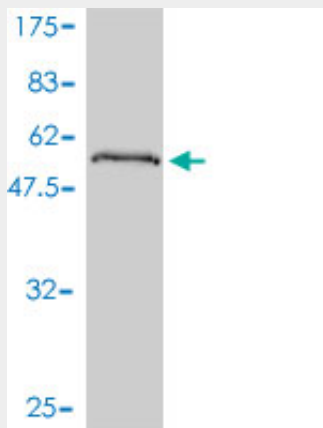
PPM1B Antibody (monoclonal) (M01) - Images



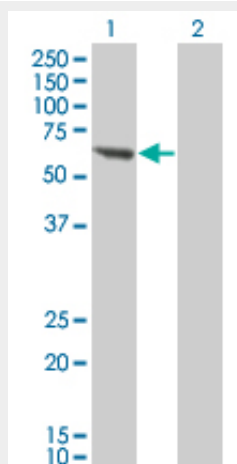
Immunofluorescence of monoclonal antibody to PPM1B on HeLa cell. [antibody concentration 10 ug/ml]



Immunoprecipitation of PPM1B transfected lysate using anti-PPM1B monoclonal antibody and Protein A Magnetic Bead ([U0007](#)), and immunoblotted with PPM1B monoclonal antibody.

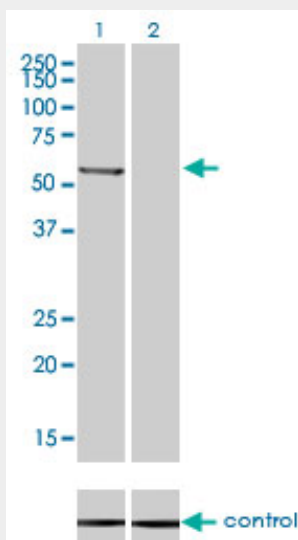


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (46.86 KDa) .

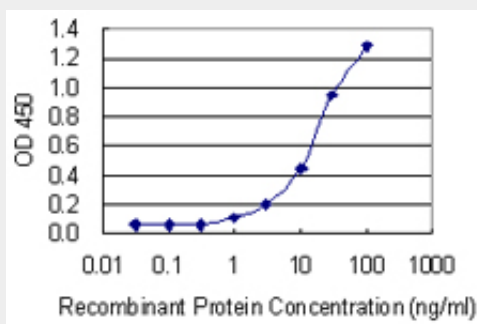


Western Blot analysis of PPM1B expression in transfected 293T cell line by PPM1B monoclonal antibody (M01), clone 1A3-2A4.

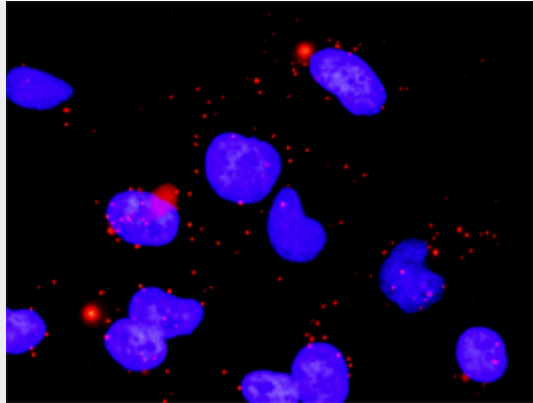
Lane 1: PPM1B transfected lysate (52.643 KDa).
Lane 2: Non-transfected lysate.



Western blot analysis of PPM1B over-expressed 293 cell line, cotransfected with PPM1B Validated Chimera RNAi (Cat # AT3406a)



Detection limit for recombinant GST tagged PPM1B is 0.3 ng/ml as a capture antibody.



Proximity Ligation Analysis of protein-protein interactions between ARRB2 and PPM1B HeLa cells were stained with anti-ARRB2 rabbit purified polyclonal 1:1200 and anti-PPM1B mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

PPM1B Antibody (monoclonal) (M01) - 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. This phosphatase has been shown to dephosphorylate cyclin-dependent kinases (CDKs), and thus may be involved in cell cycle control. Overexpression of this phosphatase is reported to cause cell-growth arrest or cell death. Alternative splicing results in multiple transcript variants encoding different isoforms. Additional transcript variants have been described, but currently do not represent full-length sequences.

PPM1B Antibody (monoclonal) (M01) - References

Personalized smoking cessation: interactions between nicotine dose, dependence and quit-success genotype score. Rose JE, et al. Mol Med, 2010 Jul-Aug. PMID 20379614. PPM1A and PPM1B act as IKKbeta phosphatases to terminate TNFalpha-induced IKKbeta-NF-kappaB activation. Sun W, et al. Cell Signal, 2009 Jan. PMID 18930133. Phosphatase PPM1A regulates phosphorylation of Thr-186 in the Cdk9 T-loop. Wang Y, et al. J Biol Chem, 2008 Nov 28. PMID 18829461. Functional specialization of beta-arrestin interactions revealed by proteomic analysis. Xiao K, et al. Proc Natl Acad Sci U S A, 2007 Jul 17. PMID 17620599. Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.

PPM1B Antibody (monoclonal) (M01) - Citations

- [TRIM59 promotes tumor growth in hepatocellular carcinoma and regulates the cell cycle by degradation of protein phosphatase 1B.](#)