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PPM1B Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant PPM1B.
Catalog # AT3406a

Product Information

Application	WB, IF, IP, E
Primary Accession	O75688
Other Accession	BC012002
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 kappa
Clone Names	1A3-2A4
Calculated MW	52643

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.

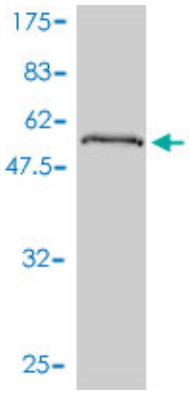
Background

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.

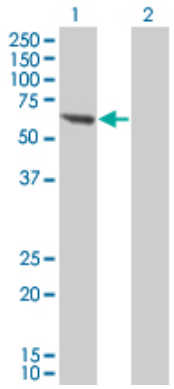
References

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.

Images

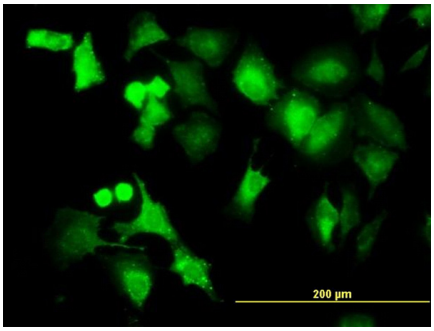


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (46.86 KDa) .



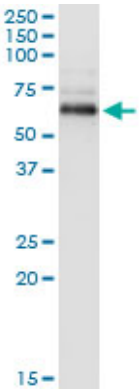
Western Blot analysis of PPM1B expression in transfected 293T cell line by PPM1B monoclonal antibody (M01), clone 1A3-2A4.

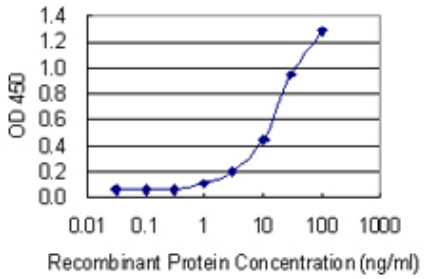
Lane 1: PPM1B transfected lysate(52.643 KDa).
Lane 2: Non-transfected lysate.



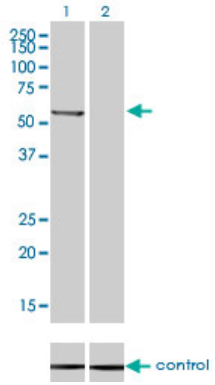
Immunofluorescence of monoclonal antibody to PPM1B on HeLa cell. [antibody concentration 10 ug/ml]

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

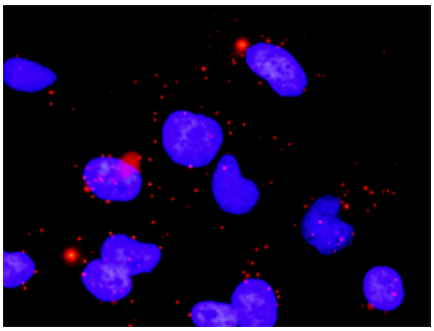




Detection limit for recombinant GST tagged PPM1B is 0.3 ng/ml as a capture antibody.



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



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).

Citations

- TRIM59 promotes tumor growth in hepatocellular carcinoma and regulates the cell cycle by degradation of protein phosphatase 1B

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.