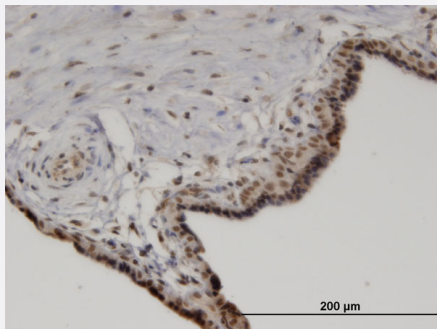


PPM1A monoclonal antibody (M03), clone 4E11

Catalog # H00005494-M03

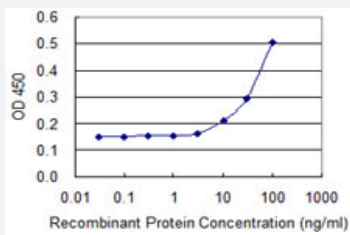
Size 100 ug

Applications



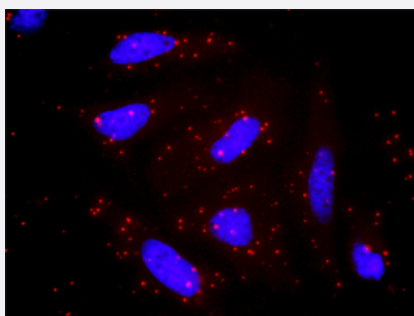
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to PPM1A on formalin-fixed paraffin-embedded human placenta. [antibody concentration 3 ug/ml]



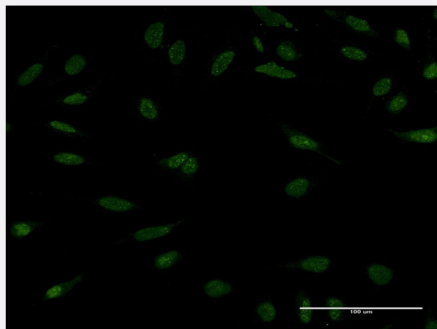
Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged PPM1A is 3 ng/ml as a capture antibody.



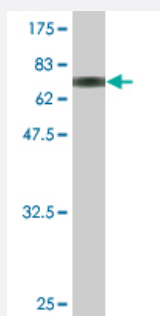
In situ Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between AKT1 and PPM1A. HeLa cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-PPM1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Immunofluorescence

Immunofluorescence of monoclonal antibody to PPM1A on HeLa cell .
[antibody concentration 10 ug/ml]



Western Blot detection against Immunogen (67.76 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a full-length recombinant PPM1A.
Immunogen	PPM1A (AAH26691, 1 a.a. ~ 382 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	<p>MGAFLDKPKMEKHNAQQGNGRLRYGLSSMQGWRVEMEDAHTAVIGLPSGLESWSFFAVYDGH</p> <p>AGSQVAKYCCEHLLDHITNNQDFKGSAGAPSVENVKNGIRTGFLEIDHMRVMSEKKHGADRSG</p> <p>STAVGVLISPQHTYFINCGDSRGLLCRNKRVHFFTQDHKPSNPLEKERIQNAGGSVMIQRVNGSLA</p> <p>VSRALGDFDYKCVHKGPTQLVSPEPEVHDIERSEEDDQFIILACDGMWDMGNEELCDFVRSR</p> <p>LEVTDDEKVCNEVVDTCLYKGSRDNMSVILICFPNAPKVSPEAVKKEAELDKYLECRVEEIIKKQ</p> <p>GEGVPDLVHVMRTLASENIPSLPPGGELASKRNVIEAVYNRLNPYKNDTDTSTDDMW</p>
Host	Mouse
Reactivity	Human
Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (67.76 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to PPM1A on formalin-fixed paraffin-embedded human placenta. [antibody concentration 3 ug/ml]

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged PPM1A is 3 ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

- In situ* Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between AKT1 and PPM1A. HeLa cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-PPM1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

- Immunofluorescence

Immunofluorescence of monoclonal antibody to PPM1A on HeLa cell . [antibody concentration 10 ug/ml]

Gene Info — PPM1A

Entrez GeneID	5494
GeneBank Accession#	BC026691
Protein Accession#	AAH26691
Gene Name	PPM1A
Gene Alias	FLJ42306, MGC9201, PP2C-ALPHA, PP2CA
Gene Description	protein phosphatase 1A (formerly 2C), magnesium-dependent, alpha isoform
Omim ID	606108
Gene Ontology	Hyperlink

Gene Summary

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 dephosphorylates, and negatively regulates the activities of, MAP kinases and MAP kinase kinases. It has been shown to inhibit the activation of p38 and JNK kinase cascades induced by environmental stresses. This phosphatase can also dephosphorylate cyclin-dependent kinases, and thus may be involved in cell cycle control. Overexpression of this phosphatase is reported to activate the expression of the tumor suppressor gene TP53/p53, which leads to G2/M cell cycle arrest and apoptosis. Three alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq]

Other Designations

protein phosphatase 1A|protein phosphatase 2C alpha isoform

Publication Reference

- [Autoantibodies against Protein Phosphatase Magnesium-Dependent 1A as a Biomarker for Predicting Radiographic Progression in Ankylosing Spondylitis Treated with Anti-Tumor Necrosis Factor Agents.](#)

Jung-Sun Lee, Eun-Ju Lee, Jae-Hyun Lee, Seok-Chan Hong, Chang-Keun Lee, Bin Yoo, Ji-Seon Oh, Sang-Hoon Lee, Tae-Jong Kim, Seung-Hun Lee, Sung-Sin Jo, Dae-Hyun Yoo, Ye-Soo Park, Tae-Hwan Kim, Yong-Gil Kim.

Journal of Clinical Medicine 2020 Dec; 9(12):3968.

Application: ELISA, Human, As a standard, Human serum

Pathway

- [MAPK signaling pathway](#)

Disease

- [Tobacco Use Disorder](#)