Mouse anti-Human PPM1A Monoclonal Antibody | anti-PPM1A antibody

Anti-PPM1A Antibody, Mouse Monoclonal

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA255619	**Mouse**	**Human**	**Immunofluorescence, Immunocytochemistry, Flow Cytometry, Functional Assay**

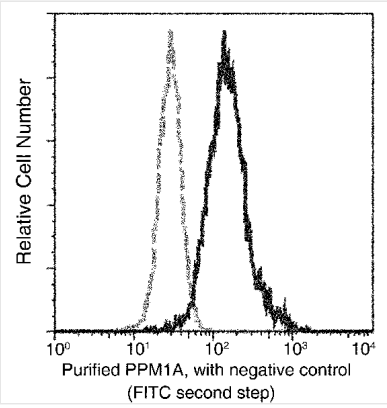
PRODUCT SYNONYMS

PPM1A; Monoclonal Antibody; Anti-PPM1A Antibody; Mouse Monoclonal; PPM1A/PP2CA/PP2C-alpha Antibody; Mouse MAb; protein phosphatase; Mg2+/Mn2+ dependent; 1A; Anti-PP2C-ALPHA Antibody; Anti-PP2CA Antibody; Anti-PP2Calpha Antibody; anti-PPM1A antibody

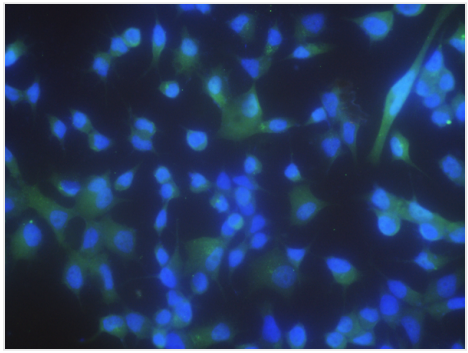
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG2a
Clone Number	01
Specificity	Human PPM1A/PP2C-alpha
Purity/Purification	Protein A
Form/Format	Liquid; 0.2um filtered solution in PBS
Applicable Applications for anti-PPM1A antibody	IF (Immunofluorescence), ICC (Immunocytochemistry), FCM/FACS (Flow Cytometry)
Immunogen	Recombinant Human PPM1A/PP2C-alpha protein
Conjugation	Unconjugated
Preparation	This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human PPM1A/PP2C-alpha (rh PPM1A/PP2C-alpha). The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography.
Preparation and Storage	This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.

IMAGES



FCM/FACS (Flow Cytometry)
Flow cytometric analysis of Human PPM1A expression on Jurkat cells. The cells were treated according to manufacturer's manual (BD Pharmingen'), stained with purified anti-Human PPM1A, then a FITC-conjugated second step antibody. The fluorescence histograms were derived from gated events with the forward and side light-scatter characteristics of intact cells.



IF (Immunofluorescence)
Immunofluorescence staining of Human PPM1A in MCF7 cells. Cells were fixed with 4% PFA, permeabilzed with 1% Triton X-100 in PBS, blocked with 10% serum, and incubated with Mouse anti-Human PPM1A monoclonal antibody (1:60) at 4 degree C overnight. Then cells were stained with the Alexa Fluor 488-conjugated Goat Anti-mouse IgG secondary antibody (green) and counterstained with DAPI (blue). Positive staining was localized to cytoplasm.

ADDITIONAL INFORMATION

Related Product Information for anti-PPM1A antibody	Protein phosphatase 1A (PPM1A/PP2CA) is an enzyme belonging to the PP2C family of Ser/Thr protein phosphatases. Members of PP2C family are negative regulators of cell stress response pathways and the MAP kinases and MAP kinase kinases. It has also been demonstrated to inhibit the activation of p38 and JNK kinase cascades. PPM1A dephosphorylates and promotes nuclear export of TGFbeta-activated Smad2/3. Ectopic expression of PPM1A abolishes TGFbeta-induced antiproliferative and transcriptional responses, whereas depletion of PPM1A enhances TGFbeta signaling in mammalian cells. It has been demonstrated that PPM1A/PP2CA, through dephosphorylation of Smad2/3, plays a critical role in terminating TGFbeta signaling. Overexpression of PPM1A is reported to activate the expression of the tumor suppressor gene TP53/p53, which leads to cell apoptosis.
Product Categories/Family for anti-PPM1A antibody	Phosphatases and Regulators
References	Lin X, et al. (2006) PPM1A functions as a Smad phosphatase to terminate TGFbeta signaling. Cell. 125(5): 915-28.Marc F, et al. (2003) Protein phosphatase 2C binds selectively to and dephosphorylates metabotropic glutamate receptor 3. Proc Natl Acad. 100 (26): 16006-11.Mann DJ, et al. (1992) Mammalian protein serine/threonine phosphatase 2C: cDNA cloning and comparative analysis of amino acid sequences. Biochim Biophys Acta. 1130 (1): 100-4.

NCBI AND UNIPROT INFORMATION

NCBI GI #	193211600
NCBI GeneID	5494
NCBI Accession #	NP_808821.2
NCBI GenBank Nucleotide #	NM_177952.2
UniProt Accession #	P35813; O75551; B5BU11; J3KNM0
Molecular Weight	42,448 Da
NCBI Official Full Name	protein phosphatase 1A isoform 3
NCBI Official Synonym Full Names	protein phosphatase, Mg2+/Mn2+ dependent, 1A
NCBI Official Symbol	PPM1A
NCBI Official Synonym Symbols	PP2CA; PP2Calpha; PP2C-ALPHA
NCBI Protein Information	protein phosphatase 1A; protein phosphatase 1A (formerly 2C), magnesium-dependent, alpha isoform

UniProt Protein Name	Protein phosphatase 1A
UniProt Gene Name	**PPM1A**
UniProt Synonym Gene Names	PPPM1A; PP2C-alpha
UniProt Entry Name	PPM1A_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.

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Online datasheet: https://www.aaabiotech.com/monoclonal/ppm1a-antibody-clone-01-immunofluorescence-immunocytochemistry-flow-cytometry-elisa/255619