

Recombinant PPM1A/PP2CA Monoclonal Antibody

catalog number: **AN300501P**

Note: Centrifuge before opening to ensure complete recovery of vial contents.

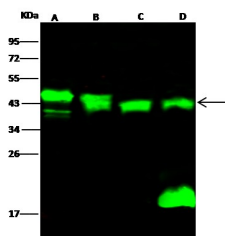
Description

Reactivity	Mouse
Immunogen	Recombinant Mouse PPM1A/PP2CA Protein
Host	Rabbit
Isotype	IgG
Clone	B431
Purification	Protein A
Buffer	0.2 µm filtered solution in PBS

Applications Recommended Dilution

WB	1:500-1:2000
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Data



Western Blot with PPM1A Monoclonal Antibody at dilution of 1:500. Lane A: Jurkat Whole Cell Lysate, Lane B: MCF7 Whole Cell Lysate, Lane C: SKBR3 Whole Cell Lysate, Lane D: Mouse brain Tissue Lysate, Lysates/proteins at 30 µg per lane.

Observed-MW:45 kDa

Calculated-MW:42 kDa

Preparation & Storage

Storage	This antibody can be stored at 2°C-8°C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20°C to -80°C. Preservative-Free. Avoid repeated freeze-thaw cycles.
Shipping	Ice bag

Background

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 TGFβ-activated Smad2/3. Ectopic expression of PPM1A abolishes TGFβ-induced antiproliferative and transcriptional responses, whereas depletion of PPM1A enhances TGFβ signaling in mammalian cells. It has been demonstrated that PPM1A/PP2CA, through dephosphorylation of Smad2/3, plays a critical role in terminating TGFβ signaling. Overexpression of PPM1A is reported to activate the expression of the tumor suppressor gene TP53/p53, which leads to cell apoptosis.

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