

## Product datasheet

### Anti-PPM1A antibody [7F12] ab135249

KO VALIDATED

6 Images

#### Overview

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<b>Product name</b>	Anti-PPM1A antibody [7F12]
<b>Description</b>	Mouse monoclonal [7F12] to PPM1A
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> WB, ELISA, Flow Cyt
<b>Species reactivity</b>	<b>Reacts with:</b> Human, African green monkey
<b>Immunogen</b>	Purified recombinant fragment corresponding to amino acids 202-382 of Human PPM1A, expressed in <i>E. coli</i> .
<b>Positive control</b>	Human PPM1A recombinant protein. Cell lysate from PPM1A transfected HEK293 cells. Cell lysates from Jurkat, A431, HeLa, HEK293, Raji, MCF-7 and COS7 cells. HeLa cells.
<b>General notes</b>	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at -20°C long term.
<b>Storage buffer</b>	Preservative: 0.05% Sodium azide Constituent: 99% PBS
<b>Purity</b>	Protein stabiliser at 0.5%. Protein G purified
<b>Purification notes</b>	Purified from tissue culture supernatant.
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	7F12

Isotype

IgG1

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab135249 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/2000. Predicted molecular weight: 42.4 kDa.
ELISA		1/10000.
Flow Cyt		1/200 - 1/400. <b>ab170190</b> - Mouse monoclonal IgG1, is suitable for use as an isotype control with this antibody.

## Target

### Function

Enzyme with a broad specificity. Negatively regulates TGF-beta signaling through dephosphorylating SMAD2 and SMAD3, resulting in their dissociation from SMAD4, nuclear export of the SMADs and termination of the TGF-beta-mediated signaling.

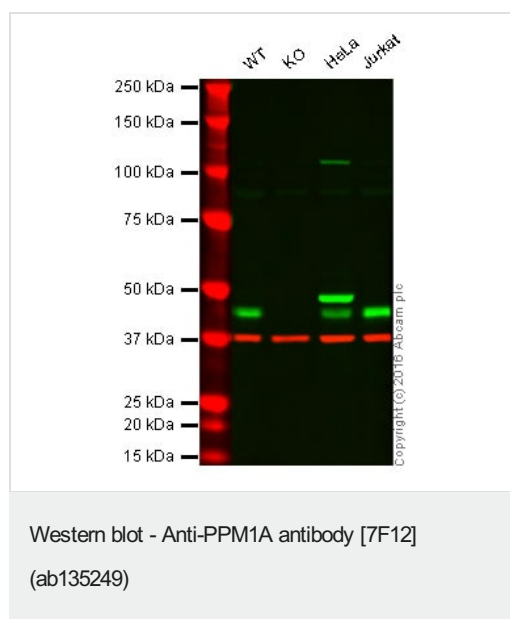
### Sequence similarities

Belongs to the PP2C family.

### Cellular localization

Nucleus.

## Images



**Lane 1:** Wild-type HAP1 cell lysate (20 µg)

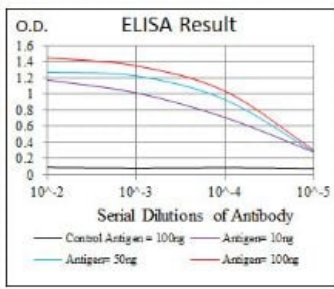
**Lane 2:** PPM1A knockout HAP1 cell lysate (20 µg)

**Lane 3:** HeLa cell lysate (20 µg)

**Lane 4:** Jurkat cell lysate (20 µg)

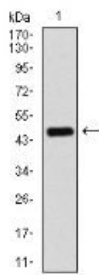
**Lanes 1 - 4:** Merged signal (red and green). Green - ab135249 observed at 42 kDa. Red - loading control, **ab18251**, observed at 37 kDa.

ab135249 was shown to specifically react with PPM1A when PPM1A knockout samples were used. Wild-type and PPM1A knockout samples were subjected to SDS-PAGE. ab135249 at a dilution of 1/500 and **ab18251** (loading control to alpha Tubulin) at a dilution of 1/10,000 were incubated overnight at 4°C. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preadsorbed **ab216772** and Goat Anti-Rabbit IgG H&L (IRDye® 680RD) preadsorbed **ab216777** secondary antibodies at 1/10,000 dilution for 1 hour at room temperature before imaging.



ELISA - Anti-PPM1A antibody [7F12] (ab135249)

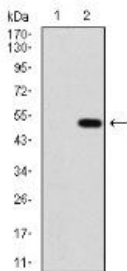
ELISA analysis using ab135249 with different concentrations of antigen.



Western blot - Anti-PPM1A antibody [7F12] (ab135249)

Anti-PPM1A antibody [7F12] (ab135249) at 1/500 dilution + Human PPM1A recombinant protein.

**Predicted band size:** 42.4 kDa



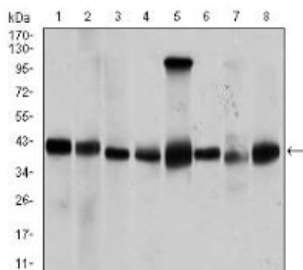
Western blot - Anti-PPM1A antibody [7F12] (ab135249)

**All lanes :** Anti-PPM1A antibody [7F12] (ab135249) at 1/500 dilution

**Lane 1 :** HEK293 cell lysate

**Lane 2 :** PPM1A (amino acids 202-382)-hlgGfC transfected HEK293 cell lysate.

**Predicted band size:** 42.4 kDa



Western blot - Anti-PPM1A antibody [7F12] (ab135249)

**All lanes :** Anti-PPM1A antibody [7F12] (ab135249) at 1/500 dilution

**Lanes 1-2 :** Jurkat cell lysate

**Lane 3 :** A431 cell lysate

**Lane 4 :** HeLa cell lysate

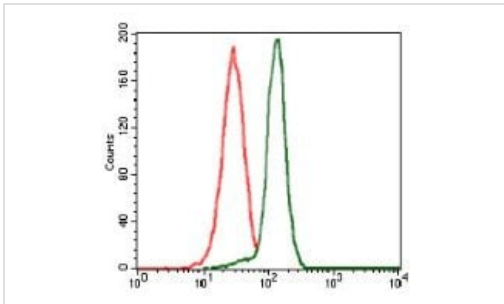
**Lane 5 :** HEK293 cell lysate

**Lane 6 :** Raji cell lysate

**Lane 7 :** MCF-7 cell lysate

**Lane 8 :** COS-7 (African green monkey kidney fibroblast-like cell line) cell lysate

**Predicted band size:** 42.4 kDa



Flow cytometric analysis of HeLa cells using ab135249 at 1/200 dilution (green) or a negative control (red).

Flow Cytometry - Anti-PPM1A antibody [7F12]  
(ab135249)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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