Product Name: KD-Validated PPM1G Recombinant Rabbit Monoclonal Antibody
Catalog #: KVAb01492
For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 59.3kDa

Antigen Information

Gene Name	PPM1G
Alternative Names	PPM1G; Protein Phosphatase, Mg2+/Mn2+ Dependent 1G; PP2CG; Protein Phosphatase Magnesium-Dependent 1 Gamma; Protein Phosphatase 1G ; Protein Phosphatase 1C; EC 3.1.3.16; PP2C-Gamma; PP2CGAMMA; Protein Phosphatase 1G (Formerly 2C), Magnesium-Dependent, Gamma Isoform; Protein Phosphatase, Mg2+/Mn2+ Dependent, 1G; Protein Phosphatase 2C, Gamma Isoform; Protein Phosphatase 2C Isoform Gamma; PP2C, Gamma; PP2Cgamma; PPP2CG; PPM1C
Gene ID	5496.0
SwissProt ID	O15355
Immunogen	A synthesized peptide derived from human PPM1G

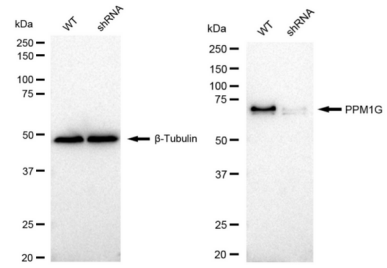
Background

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 is found to be responsible for the dephosphorylation of Pre-mRNA splicing factors, which is important for the formation of functional spliceosome. Studies of a similar gene in mice suggested a role of this phosphatase in regulating cell cycle progression. [provided by RefSeq, Apr 2010]

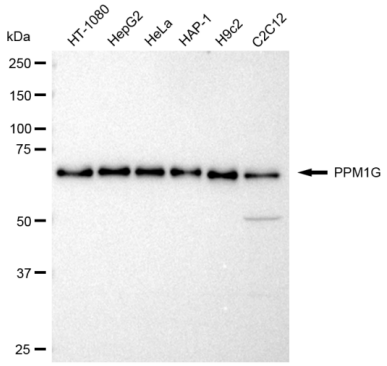
Research Area

Cell Biology,Signal Transduction,Epigenetics and Nuclear Signaling

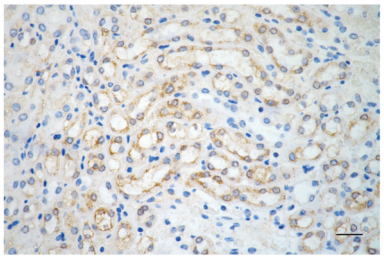
Image Data



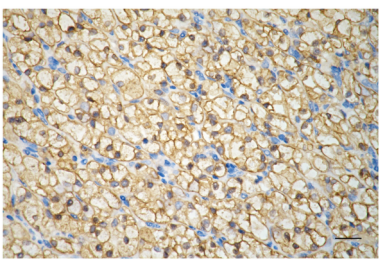
Western blotting analysis using PPM1G antibody (KVAb01492). PPM1G expression in wild type (WT) and PPM1G shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with PPM1G antibody (KVAb01492, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



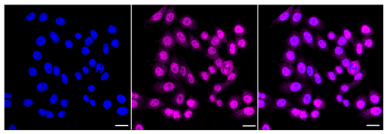
Western blotting analysis using PPM1G antibody (KVAb01492). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PPM1G antibody (KVAb01492, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



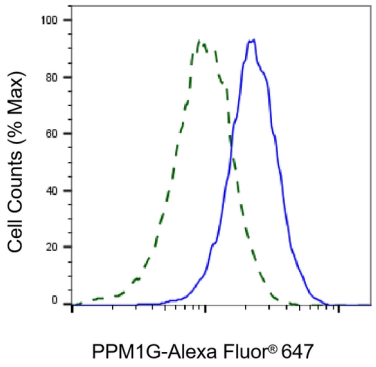
Immunohistochemistry was performed on paraffin-embedded mouse kidney using PPM1G antibody (KVAb01492, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



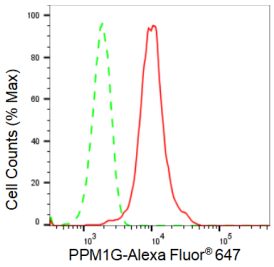
Immunohistochemistry was performed on paraffin-embedded human renal carcinoma using PPM1G antibody (KVAb01492, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunocytochemical staining of HepG2 cells with PPM1G antibody (KVAb01492, 1:1,000). Nuclei were stained blue with DAPI; PPM1G was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar: 20 µm.



Validation of PPM1G knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with PPM1G antibody (KVAb01492, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of PPM1G expression in HepG2 cells using PPM1G antibody (KVAb01492, 1:2,000). Green, isotype control; red, PPM1G.