

Product Name: KO-Validated Protein Regulator Of Cytokinesis 1 Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA00100

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: 71.6kDa

Antigen Information

Gene Name	PRC1 PRC1; Protein Regulator Of Cytokinesis 1; ASE1; MAP65; Anaphase Spindle Elongation 1
Alternative Names	Homolog (S. Cerevisiae); Anaphase Spindle Elongation 1 Homolog; Protein Regulating Cytokinesis 1
Gene ID	9055.0
SwissProt ID	O43663
Immunogen	A synthesized peptide derived from human PRC1

Background

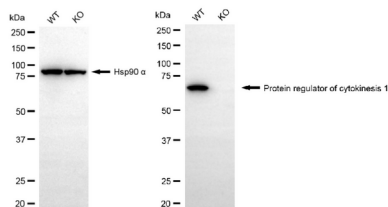
This gene encodes a protein that is involved in cytokinesis. The protein is present at high levels during the S and G2/M phases

of mitosis but its levels drop dramatically when the cell exits mitosis and enters the G1 phase. It is located in the nucleus during interphase, becomes associated with mitotic spindles in a highly dynamic manner during mitosis, and localizes to the cell mid-body during cytokinesis. This protein has been shown to be a substrate of several cyclin-dependent kinases (CDKs). It is necessary for polarizing parallel microtubules and concentrating the factors responsible for contractile ring assembly. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jun 2012]

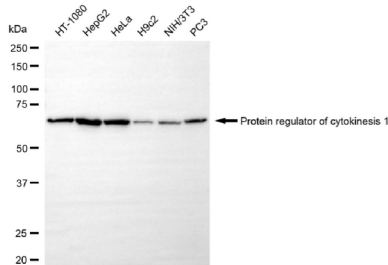
Research Area

Cell Biology

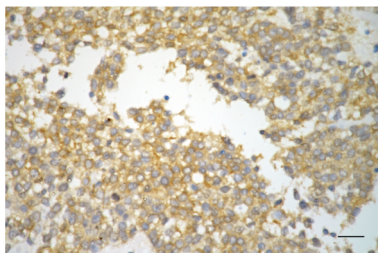
Image Data



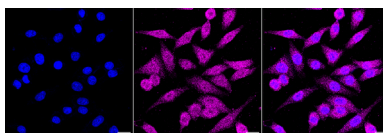
Western blotting analysis using protein regulator of cytokinesis 1 antibody (KVA00100). Protein regulator of cytokinesis 1 expression in wild-type (WT) and protein regulator of cytokinesis 1 (PRC1) knockout (KO) HSHC cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with protein regulator of cytokinesis 1 antibody (KVA00100, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



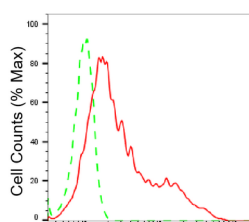
Western blotting analysis using protein regulator of cytokinesis 1 antibody (KVA00100). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with protein regulator of cytokinesis 1 antibody (KVA00100, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded human breast carcinoma using protein regulator of cytokinesis 1 antibody (KVA00100, 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 Protein regulator of cytokinesis 1 antibody (KVA00100, 1:1,000). Nuclei were stained blue with DAPI; Protein regulator of cytokinesis 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Protein regulator of cytokinesis 1-Alexa Fluor® 647

Flow cytometric analysis of Protein regulator of cytokinesis 1 expression in HepG2 cells using Protein regulator of cytokinesis 1 antibody (KVA00100, 1:2,000). Green, isotype control; red, Protein regulator of cytokinesis 1.

