

For Research Use Only

# PRC1 Monoclonal antibody

Catalog Number: 67027-1-Ig

Featured Product



## Basic Information

<b>Catalog Number:</b> 67027-1-Ig	<b>GenBank Accession Number:</b> BC003138	<b>Purification Method:</b> Protein G purification
<b>Size:</b> 150ul , Concentration: 2300 ug/ml by Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	<b>GeneID (NCBI):</b> 9055	<b>CloneNo.:</b> 1E1D5
<b>Source:</b> Mouse	<b>UNIPROT ID:</b> O43663	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:200-1:1000 IF/ICC 1:400-1:1600
<b>Isotype:</b> IgG1	<b>Full Name:</b> protein regulator of cytokinesis 1	
<b>Immunogen Catalog Number:</b> AG5907	<b>Calculated MW:</b> 72 kDa	
	<b>Observed MW:</b> 66-72 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b>
<b>Species Specificity:</b> human, mouse, rat	<b>WB :</b> HeLa cells, MCF-7 cells, HEK-293 cells, A549 cells, HepG2 cells, HSC-T6 cells, 4T1 cells
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	<b>IHC :</b> human breast cancer tissue, human lung cancer tissue
	<b>IF/ICC :</b> HeLa cells,

## Background Information

PRC1 (protein regulator of cytokinesis 1) is a microtubule-bundling protein that is involved in cytokinesis. Depletion of PRC1 leads to failed cytokinesis. PRC1 is located in the nucleus during interphase, and becomes associated with mitotic spindles in a highly dynamic manner during mitosis, and localizes to the cell mid-body during cytokinesis. PRC1 is a substrate of CDK1 and it was assumed that CDK1 phosphorylation blocks its activity during metaphase. Three isoforms of PRC1 exist due to the alternative splicing, with predictive molecular weight of 71.6 kDa, 70.2 kDa and 66.2 kDa, respectively. The dual bands between 66-72 kDa detected by this antibody may represent different forms of PRC1.

## Storage

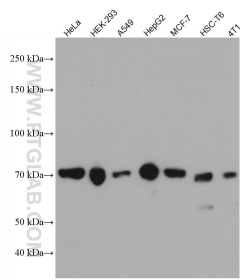
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  
**Aliquoting is unnecessary for -20°C storage**

\*\*\* 20ul sizes contain 0.1% BSA

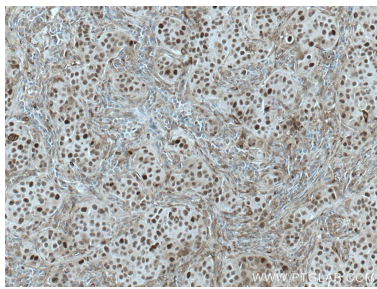
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
W: [ptglab.com](http://ptglab.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

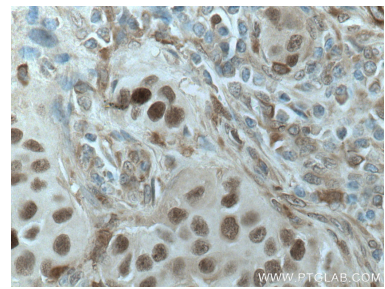
Selected Validation Data



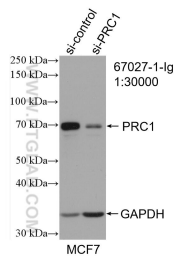
Various lysates were subjected to SDS PAGE followed by western blot with 67027-1-Ig (PRC1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



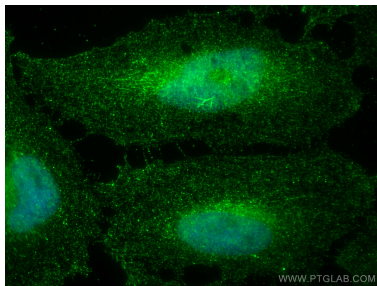
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67027-1-Ig (PRC1 antibody) at dilution of 1:500 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 67027-1-Ig (PRC1 antibody) at dilution of 1:500 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of PRC1 antibody (67027-1-Ig; 1:30000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PRC1 transfected MCF-7 cells.



Immunofluorescent analysis of (4% PFA) fixed HeLa cells using PRC1 antibody (67027-1-Ig, Clone: 1E1D5 ) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).