For Research Use Only

PRC1 Monoclonal antibody

Catalog Number:67027-1-lg Featured Product



Basic Information

Catalog Number: GenBank Accession Number:

67027-1-lg BC003138 GeneID (NCBI): Size: 150ul, Concentration: 2300 ug/ml by 9055

Nanodrop and 1000 ug/ml by Bradford_{UNIPROT ID:} method using BSA as the standard; 043663 Source:

Mouse protein regulator of cytokinesis 1

Full Name:

Isotype: Calculated MW: lgG1 72 kDa Immunogen Catalog Number: Observed MW: AG5907 66-72 kDa

Purification Method:

Protein A purification CloneNo.:

1E1D5 Recommended Dilutions: WB 1:2000-1:10000

IHC 1:200-1:1000 IF/ICC 1:400-1:1600

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA Species Specificity:

Human, mouse, rat

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen

retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB: HeLa cells, MCF-7 cells, HEK-293 cells, A549 cells,

HepG2 cells, HSC-T6 cells, 4T1 cells

IHC: human breast cancer tissue, human lung cancer

IF/ICC: 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. $PRC1\ is\ a\ substrate\ of\ CDK1\ and\ it\ was\ assumed\ that\ CDK1\ phosphory lation\ blocks\ its\ activity\ during\ metaphase.$ Three isoforms of PRC1 exist due to the alternative splicing, with predictive molecular weight of $71.6\,\mathrm{kDa}$, $70.2\,\mathrm{kDa}$ and 66.2 kDa, respectively. The dual bands between 66-72 kDa detected by this antibody may represent different forms of PRC 1.

Storage

Storage:

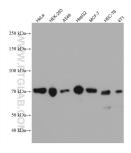
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

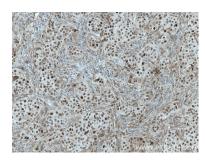
*** 20ul sizes contain 0.1% BSA

Aliquoting is unnecessary for -20°C storage

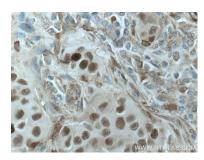
Selected Validation Data



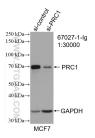
Various lysates were subjected to SDS PAGE followed by western blot with 67027-1-1g (PRC1 antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



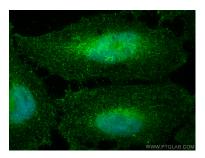
Immunohistochemical analysis of paraffinembedded human breast cancer tissue slide using 67027-1-Ig (PRC1 antibody) at dilution of 1:500 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded 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-lg: 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 (67027-1-1g, Clone: 1E1D5) at dilution of 1:800 and Coralite®488-Conjugated Goat Anti-Mouse IgG(H+L).