

**PRC1 Antibody**  
Rabbit mAb  
Catalog # AP90071

## Specification

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### PRC1 Antibody - Product Information

Application	WB, IHC, FC, ICC, IP
Primary Accession	<a href="#">O43663</a>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
<b>Other Names</b>	
ASE1; PRC1; Protein regulating cytokinesis 1;	
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	71607 Da

### PRC1 Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human PRC1
Description	Cross-links antiparrallel microtubules at an average distance of 35 nM. Essential for controlling the spatiotemporal formation of the midzone and successful cytokinesis. Required for KIF14 localization to the central spindle and midbody.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

### PRC1 Antibody - Protein Information

Name PRC1 ([HGNC:9341](#))

#### Function

Key regulator of cytokinesis that cross-links antiparrallel microtubules at an average distance of 35 nM. Essential for controlling the spatiotemporal formation of the midzone and successful cytokinesis. Required for KIF14 localization to the central spindle and midbody. Required to recruit PLK1 to the spindle. Stimulates PLK1 phosphorylation of RACGAP1 to allow recruitment of ECT2 to the central spindle. Acts as an oncogene for promoting bladder cancer cells proliferation, apoptosis inhibition and carcinogenic progression (PubMed:<a href="http://www.uniprot.org/citations/17409436" target="\_blank">17409436</a>).

#### Cellular Location

Nucleus. Cytoplasm. Cytoplasm, cytoskeleton, spindle pole. Midbody. Chromosome.

Note=Colocalized with KIF20B in the nucleus of bladder carcinoma cells at the interphase. Colocalized with KIF20B in bladder carcinoma cells at prophase, metaphase, early anaphase, at the midzone in late anaphase and at the contractile ring in telophase (PubMed:17409436). Predominantly localized to the nucleus of interphase cells. During mitosis becomes associated with the mitotic spindle poles and localizes with the cell midbody during cytokinesis Co-localizes with PRC1 in early mitosis and at the spindle midzone from anaphase B to telophase (PubMed:15297875, PubMed:15625105)

#### Tissue Location

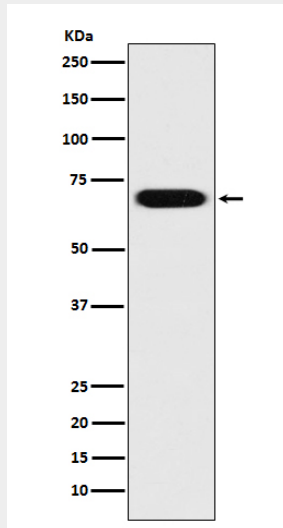
Overexpressed in bladder cancer cells (PubMed:17409436).

#### PRC1 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### PRC1 Antibody - Images



Western blot analysis of PRC1 expression in HeLa cell lysate.