

**PRC1(Phospho-Thr481)Polyclonal Antibody**  
Catalog # AP68145**Specification****PRC1(Phospho-Thr481)Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">O43663</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal

**PRC1(Phospho-Thr481)Polyclonal Antibody - Additional Information****Gene ID** 9055**Other Names**

Protein regulator of cytokinesis 1

**Dilution**

WB~~WB 1:500-2000, ELISA 1:10000-20000

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**PRC1(Phospho-Thr481)Polyclonal 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

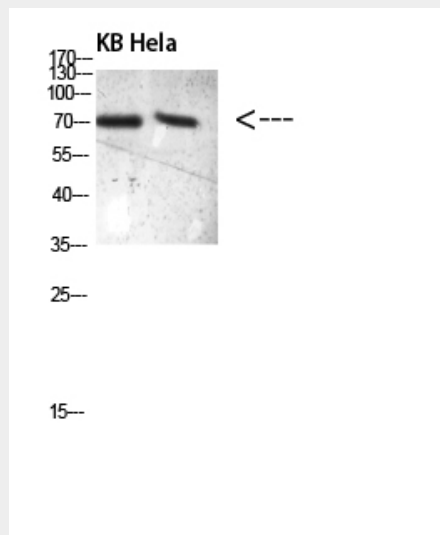
Overexpressed in bladder cancer cells (PubMed:17409436).

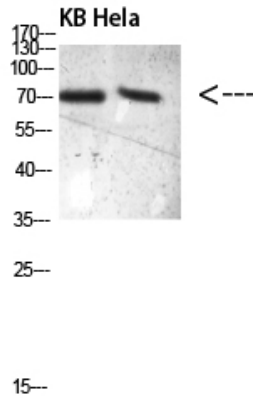
#### PRC1(Phospho-Thr481)Polyclonal Antibody - Protocols

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(Phospho-Thr481)Polyclonal Antibody - Images





### **PRC1(Phospho-Thr481)Polyclonal Antibody - Background**

Key regulator of cytokinesis that cross-links antiparallel 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:17409436).