

### PRC1 (Phospho Thr470) Rabbit pAb

Catalog No: YP1863

**Reactivity:** Human; Mouse

**Applications:** IHC;WB

Target: PRC1

Gene Name: PRC1

**Protein Name:** Protein regulator of cytokinesis 1

O43663

Q99K43

Human Gene ld: 9055

**Human Swiss Prot** 

No:

Mouse Gene ld: 233406

**Mouse Swiss Prot** 

No:

**Immunogen:** Synthesized peptide derived from human PRC1 (Phospho Thr470)

**Specificity:** This antibody detects endogenous levels of PRC1 (Phospho Thr470) Rabbit

pAb at Human, Mouse

**Formulation :** Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.

Source: Rabbit,polyclonal

**Dilution:** WB 1:500-2000 IHC 1:50-200

**Purification:** The antibody was affinity-purified from rabbit serum by affinity-chromatography

using specific immunogen.

Concentration: 1 mg/ml

**Storage Stability:** -15°C to -25°C/1 year(Do not lower than -25°C)

1/3



Observed Band:

72kD

#### **Background:**

protein regulator of cytokinesis 1(PRC1) Homo sapiens 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],

#### **Function:**

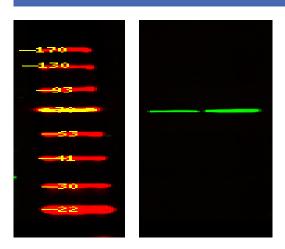
function:KIF4A translocates PRC1 to the plus ends of interdigitating spindle microtubules during the metaphase to anaphase transition, an essential step for the formation of an organized central spindle midzone and midbody and for successful cytokinesis. Required for KIF14 localization to the central spindle and midbody. Acts as a microtubule-binding and bundling protein both in vivo and vitro. May function as an in vivo cyclin-CDK substrate.,PTM:Phosphorylated; very weak in G1/S phase cells. Much higher levels of phosphorylation are detected at later cell cycle phases, reaching a maximum during mitosis.,similarity:Belongs to the MAP65/ASE1 family.,subcellular location: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.,subunit:Interacts with the C-terminal Rho

# Subcellular Location :

Nucleus . Cytoplasm. Cytoplasm, cytoskeleton, spindle pole . Midbody . Chromosome . 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. Colocalizes with PRC1 in early mitosis and at the spindle midzone from anaphase B to telophase (PubMed:15297875, PubMed:15625105).

Expression:	Overexpressed in bladder cancer cells (PubMed:17409436).
Tag:	orthogonal
Sort:	999
No4:	
Host:	Rabbit
<b>Modifications:</b>	Phospho

## **Products Images**



Western Blot analysis of 1Raji cell 2 Serum-free treated ,using primary antibody at 1:1000 dilution. Secondary antibody(catalog#:RS23920) was diluted at 1:10000