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PRC1 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS15618

Specification

PRC1 Antibody (Internal) - Product Information

Application	**IHC, IF, WB**
Primary Accession	O43663
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**72kDa KDa**

PRC1 Antibody (Internal) - Additional Information

Gene ID 9055

Other Names
Protein regulator of cytokinesis 1, PRC1 {ECO:0000312|EMBL:AAC02688.1}

Target/Specificity
Human PRC1. At least three alternatively spliced transcript variants encoding distinct isoforms have been observed.

Reconstitution & Storage
Store at -20°C. Aliquot to avoid freeze/thaw cycles.

Precautions
PRC1 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

PRC1 Antibody (Internal) - 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:17409436).

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)

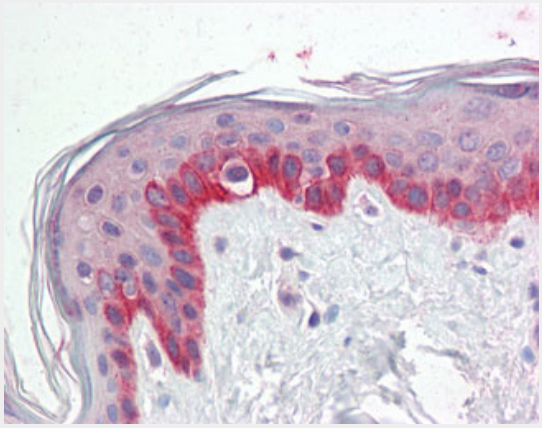
Tissue Location
Overexpressed in bladder cancer cells (PubMed:17409436).

PRC1 Antibody (Internal) - Protocols

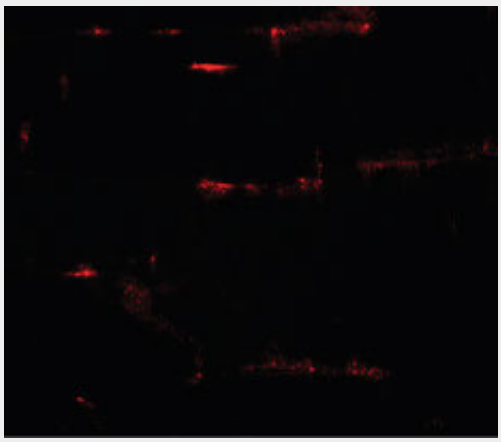
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PRC1 Antibody (Internal) - Images



Anti-PRC1 antibody IHC staining of human skin.



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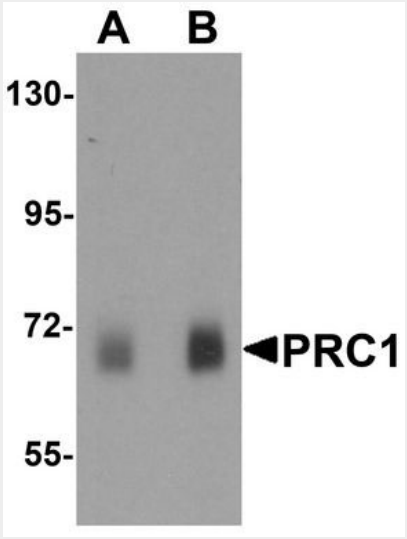
Immunofluorescence of PRC1 in mouse skeletal muscle tissue with PRC1 antibody at 20 ug/ml.



Western blot analysis of PRC1 in human skeletal muscle tissue lysate with Prc1 antibody at (A)...

PRC1 Antibody (Internal) - Background

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.

PRC1 Antibody (Internal) - References

Jiang W.,et al.Mol. Cell 2:877-885(1998).
Ota T.,et al.Nat. Genet. 36:40-45(2004).
Zody M.C.,et al.Nature 440:671-675(2006).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).
Mollinari C.,et al.J. Cell Biol. 157:1175-1186(2002).