

KO-Validated Anti-Protein Regulator Of Cytokinesis 1 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody
Catalog # AGI2432

Product Information

Application	WB, FC, ICC
Primary Accession	O43663
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Clone Names	25GB3195
Calculated MW	71607
Gene Name	PRC1
Aliases	PRC1; Protein Regulator Of Cytokinesis 1; ASE1; MAP65; Anaphase Spindle Elongation 1 Homolog (S. Cerevisiae); Anaphase Spindle Elongation 1 Homolog; Protein Regulating Cytokinesis 1
Immunogen	A synthesized peptide derived from human PRC1

Additional Information

Gene ID	9055
Other Names	Protein regulator of cytokinesis 1 {ECO:0000312 HGNC:HGNC:9341}, PRC1 (HGNC:9341)

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).

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