
Recombinant Human PRC1 Protein (His tag)**Cat.NO.: TP06863**

3th Edition

Synonyms:ASE1

Description:PRC1 (protein regulator of cytokinesis 1) is a key regulator of cytokinesis that cross-links antiparallel microtubules at an average distance of 35 nM. It is essential for controlling the spatiotemporal formation of the midzone and successful cytokinesis. PRC1 is required for KIF14 localization to the central spindle and midbody. It is also required to recruit PLK1 to the spindle. PRC1 stimulates PLK1 phosphorylation of RACGAP1 to allow recruitment of ECT2 to the central spindle. It is a homodimer and interacts with the C-terminal Rho-GAP domain and the basic region of RACGAP1. The interaction with RACGAP1 inhibits its GAP activity towards CDC42 in vitro, which may be required for maintaining normal spindle morphology. PRC1 also interacts separately via its N-terminal region with the C-terminus of CENPE, KIF4A and KIF23 during late mitosis. It interacts with KIF14, IF20A and PLK1.

Form:PBS**Molecular Weight:**74 kDa**Sequences:**Met 1-Ser 620**Purity:**> 95% by HPLC**Concentration:****Endotoxin Level:**<1.0 EU per 1 ug of protein (determined by LAL method)**Storage:**Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.