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Datasheet for ABIN7317266

PRC1 Protein (His tag)

Overview

Quantity:	50 µg
Target:	PRC1
Origin:	Human
Source:	Baculovirus infected Insect Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PRC1 protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human PRC1 Protein (His Tag)
Sequence:	Met 1-Ser 620
Characteristics:	A DNA sequence encoding the human PRC1 isoform 1 (NP_003972.1) (Met 1-Ser 620) was expressed, with a polyhistidine tag at the N-terminus.
Purity:	> 95 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	PRC1
Alternative Name:	PRC1 (PRC1 Products)
Background:	Background: PRC1 (protein regulator of cytokinesis 1) is a key regulator of cytokinesis that cross-links antiparrallel microtubules at an average distance of 35 nM. It is essential for controlling the spatiotemporal formation of the midzone and successful cytokinesis. PRC1 is

Target Details

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.

Synonym: ASE1

Molecular Weight: 74 kDa

NCBI Accession: [NP_003972](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from sterile 20 mM Tris, 500 mM NaCl, pH 8.0, 20 % glycerol, 3 mM DTT

Storage: 4 °C,-20 °C,-80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.