

Purified anti-PRC1 Antibody

Catalog# / Size	629001 / 25 µg 629002 / 100 µg
Clone	6G2
Regulatory Status	RUO
Other Names	Protein regulator of cytokinesis 1, Mitotic spindle-associated CDK substrate, Protein regulating cytokinesis 1
Isotype	Mouse IgG2b, κ
Description	PRC1 (also known as protein regulator of cytokinesis 1 and mitotic spindle-associated CDK substrate) is a member of the MAP65/ASE1 family with a molecular weight of approximately 72 kD. PRC1 localization changes with cell-cycle position and can be found in the nucleus, the mitotic spindle, and the cell mid-body. PRC1 is a mitotic spindle-associated CDK substrate protein required for cytokinesis and maintenance of the spindle midzone. PRC1 can be modified by phosphorylation and has been shown to interact with Cdc2 and Cdk2. The 6G2 antibody recognizes the human PRC1 protein and has been shown to be useful for Western blotting.

Product Details

Verified Reactivity	Human
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Amino Acid: 1-150
Formulation	This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide at 0.5 mg/ml.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	WB - Quality tested KO/KD-WB - Verified
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 2.5 - 5.0 µg per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.
Product Citations	<ol style="list-style-type: none">1. Udy D, <i>et al.</i> 2015. PLoS One. 10: 0134738. PubMed2. Elting MW <i>et al.</i> 2017. Current biology : CB. 27(14):2112-2122 . PubMed3. Suresh P, <i>et al.</i> 2020. eLife. 9:e53807.. PubMed
RRID	AB_2169532 (BioLegend Cat. No. 629001) AB_2169531 (BioLegend Cat. No. 629002)

Antigen Details

Structure	Human PRC1 has 4 isoforms with MW ranging from 61-72 kD.
Distribution	Cell cycle-dependent; nuclear, mitotic spindle, cell mid-body
Function	Mitotic spindle-associated CDK substrate protein required for cytokinesis, maintains the spindle midzone

Interaction	Cdc2, Cdk2
Modification	Phosphorylation
Biology Area	Cell Biology, Cell Cycle/DNA Replication, Cell Motility/Cytoskeleton/Structure
Antigen References	1. Jiang W, <i>et al.</i> 1998. <i>Mol. Cell</i> 2:877. 2. Mollinari C, <i>et al.</i> 2002. <i>J. Cell Biol.</i> 157:1175.
Gene ID	9055

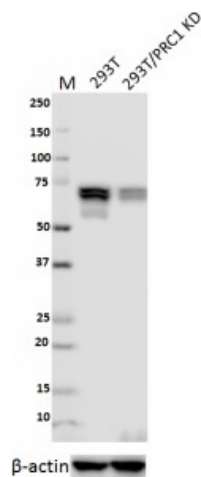
Related Protocols

[Western Blotting Protocol](#)

Other Formats

Purified anti-PRC1

Product Data



Total lysates (15 µg protein) from 293T and 293T/PRC1 CRISPR/Cas9 knockdown (KD) cells were resolved by electrophoresis (4-20% Tris-Glycine gel), transferred to nitrocellulose, and probed with 1:1000 diluted (0.5 µg/mL) purified anti-PRC1 antibody, clone 6G2 (upper). Proteins were visualized using chemiluminescence detection by incubating with 1:3000 dilution of HRP goat anti-mouse-IgG secondary antibody (Cat. No. 405306). 1:2000 dilution of Direct-Blot™ HRP anti-β-actin Antibody (Cat. No. 643807) was used as a loading control (lower). Lane M: MW ladder.

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