abcam

Product datasheet

Anti-PRC1 antibody [EP1513Y] ab51248

重组 RabMAb

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概述

产品名称	Anti-PRC1抗体[EP1513Y]
描述	兔单克隆抗体[EP1513Y] to PRC1
宿主	Rabbit
经测试应用	**适用于:** Flow Cyt (Intra), WB, ICC/IF
种属反应性	**与反应:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	ICC/IF: HeLa cells Flow Cyt (intra): HeLa cells WB: HeLa, C6 and C2C12 whole cell lysates. Mouse and rat kidney tissue.
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

性能

形式	Liquid
存放说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EP1513Y
同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用ab51248于以下的经测试应用**

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/30. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★☆ (1)	1/1000. Detects a band of approximately 72 kDa (predicted molecular weight: 72 kDa).
ICC/IF	★★★★★ (2)	1/50.

靶标

功能 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.

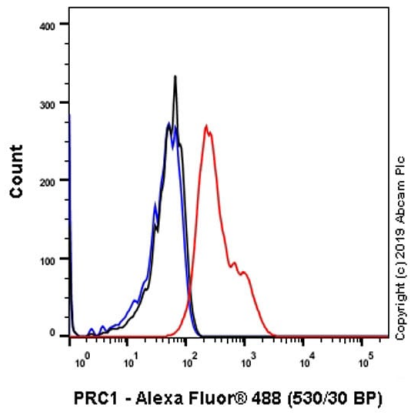
序列相似性 Belongs to the MAP65/ASE1 family.

结构域 Microtubule binding occurs via a basic patch in the central spectrin-like domain and requires also the unstructured C-terminal domain.

翻译后修饰 Phosphorylation by CDK1 in early mitosis holds PRC1 in an inactive monomeric state, during the metaphase to anaphase transition, PRC1 is dephosphorylated, promoting interaction with KIF4A, which then translocates PRC1 along mitotic spindles to the plus ends of antiparallel interdigitating microtubules. Dephosphorylation also promotes MT-bundling activity by allowing dimerization.

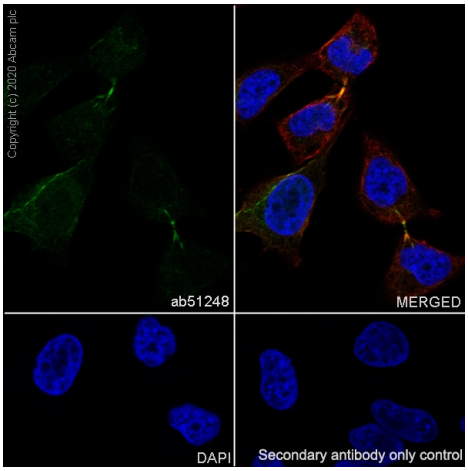
细胞定位 Nucleus. Cytoplasm. Cytoplasm > cytoskeleton > spindle pole. Predominantly localized to the nucleus of interphase cells. During mitosis becomes associated with the mitotic spindle poles and localizes with the cell midbody during cytokinesis.

图片



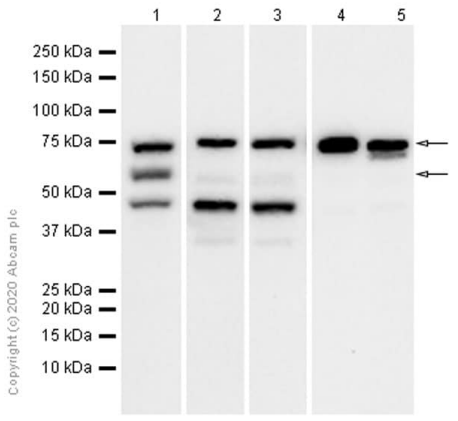
Flow Cytometry (Intracellular) - Anti-PRC1 antibody [EP1513Y] (ab51248)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling PRC1 with Purified 51248 at 1/30 dilution (10 µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunocytochemistry/ Immunofluorescence - Anti-PRC1 antibody [EP1513Y] (ab51248)

Immunocytochemistry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling PRC1 with Purified 238427 at 1:50 dilution (5.06 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488,**ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Western blot - Anti-PRC1 antibody [EP1513Y] (ab51248)

All lanes : Anti-PRC1 antibody [EP1513Y] (ab51248) at 1/1000 dilution (Purified)

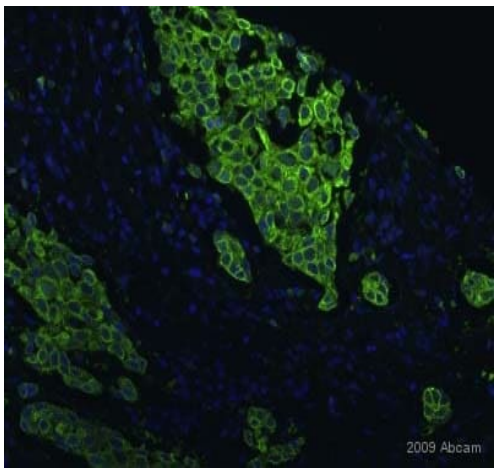
Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate
Lane 2 : C6 (Rat glial tumor glial cell) whole cell lysate
Lane 3 : C2C12 (Mouse myoblasts myoblast) whole cell lysate
Lane 4 : Mouse kidney lysate
Lane 5 : Rat kidney lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 72 kDa

ab51248 recognise two isoforms of PRC1. But we are unsure how to define the extra bands at ~50kDa.



Immunocytochemistry/ Immunofluorescence - Anti-PRC1 antibody [EP1513Y] (ab51248)

This image is courtesy of an anonymous Abreview

ab51248 staining PRC1 in human breast cancer cells by ICC/IF. The cells were paraformaldehyde fixed and blocked in 1% serum for 1 hour at 37°C without permeation step. The primary antibody was diluted 1/100 (PBS) and incubated with sample for 1 hour at 20°C. An Alexa Fluor® 488 conjugated donkey polyclonal to rabbit IgG, diluted 1/200 was used as secondary.

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