abcam

Product datasheet

Anti-PRC1 antibody [EP1513Y] ab51248

יולצעבע RabMAb

★★★★ 4 Abreviews 15 References 画像数4

製品の概要

製品名 Anti-PRC1 antibody [EP1513Y]

製品の詳細 Rabbit monoclonal [EP1513Y] to PRC1

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), WB, ICC/IF

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール ICC/IF: HeLa cells Flow Cyt (intra): HeLa cells WB: HeLa, C6 and C2C12 whole cell lysates.

Mouse and rat kidney tissue.

特記事項 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**.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル クローン名 EP1513Y

アイソタイプ lqG

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab51248の使用に適用されますアプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/30. ab172730 - Rabbit monoclonal lgG, 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	★★★★★ <u>(2)</u>	1/50.

ターゲット情報

機能
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.

配列類似性 Belongs to the MAP65/ASE1 family.

ドメイン Microtubule binding occurs via a basic patch in the central spectrin-like domain and requires also

the unstructured C-terminal domain.

翻訳後修飾 Phosphorylation by CDK1 in early mitosis holds PRC1 in an inactive monomeric state, during the

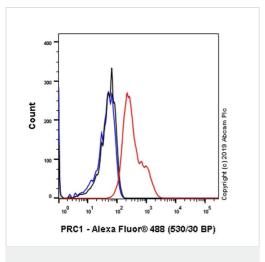
metaphase to anaphase transition, PRC1 is dephosphorylated, promoting interaction with KIF4A, which then translocates PRC1 along mitotic spindles to the plus ends of antiparallel interdigitating microtubules. Dephosphorylation also promotes MT-bundling activity by allowing dimerization.

細胞内局在 Nucleus. Cytoplasm. Cytoplasm > cytoskeleton > spindle pole. Predominantly localized to the

nucleus of interphase cells. During mitosis becomes associated with the mitotic spindle poles and

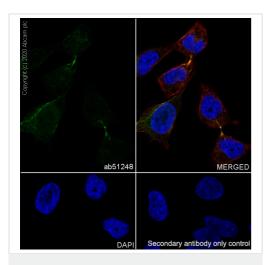
localizes with the cell midbody during cytokinesis.

画像



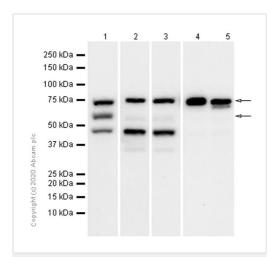
Flow Cytometry (Intracellular) - Anti-PRC1 antibody [EP1513Y] (ab51248)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling PRC1 with Purified 51248 at 1/30 dilution (10 μ g/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit lgG (Alexa Fluor $^{\tiny (\!R\!)}$ 488, $\underline{ab150077}$) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal lgG (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 μ g/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 μ g/ml). Goat anti rabbit lgG (Alexa Fluor® 488,<u>ab150077</u>) was used as the secondary antibody at 1:1000 (2 μ g/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 lgG H&L (HRP) (<u>ab97051</u>) 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.

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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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