abcam

Product datasheet

Anti-CDKN2A/p14ARF antibody [EPR17878] ab185620





重组 RabMAb

4 References 7 图像

概述

产品名称 Anti-CDKN2A/p14ARF抗体[EPR17878]

描述 兔单克隆抗体[EPR17878] to CDKN2A/p14ARF

宿主 Rabbit

经测试应用 适用于: Flow Cyt (Intra), ICC/IF, IP, WB

种属反应性 与反应: Human

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

阳性对照 WB: HeLa whole cell lysate transfected with CDKN2A/p14ARF with His-tag; PC-3 and HEK-293

> whole cell lysates. ICC/IF: HeLa cells transfected with CDKN2A/p14ARF. Flow Cyt (intra): HeLa cells transfected with CDKN2A/p14ARF-GFP. IP: CDKN2A/p14ARF transfected HeLa whole cell

lysate.

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

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

存储溶液 pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆 克隆编号 **EPR17878**

同种型 lgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab185620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)		1/120. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
ICC/IF		1/250.
IP		1/80.
WB		1/1000. Detects a band of approximately 14 kDa (predicted molecular weight: 14 kDa).

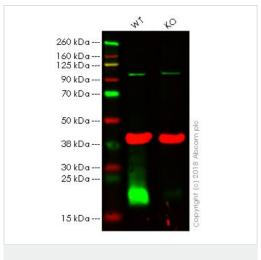
相关性

The gene for CDK2NA generates several transcripts/proteins which differ from each other in their first exons. Three of these transcripts are generated by alternative splicing (isoform 1 a.k.a p16lNK4A, isoform 2 and isoform 3 a.k.a p12), two of which are known to function as inhibitors of CDK4 kinase. One other transcript that is generated from this gene contains an alternate reading frame (ARF), with the first exon located 20kb upstream of the remainder of the gene(isoform 4 a.k.a. p14ARF, p19ARF, ARF). In spite of the structural and some functional differences, all the proteins encoded by the CDKN2A gene are involved in cell cycle G1 control.

细胞定位

Cytoplasmic and Nuclear

图片



Western blot - Anti-CDKN2A/p14ARF antibody [EPR17878] (ab185620)

All lanes: Anti-CDKN2A/p14ARF antibody [EPR17878] (ab185620) at 1/1000 dilution

Lane 1: Wild-type HeLa whole cell lysate

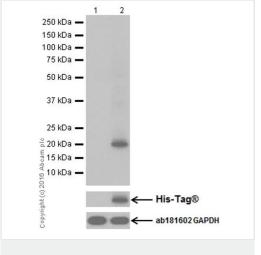
Lane 2: CDKN2A knockout HeLa whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 14 kDa

Lanes 1 - 2: Merged signal (red and green). Green - ab185620 observed at 14 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab185620 was shown to specifically react with CDKN2A/p14ARF in wild-type HeLa cells as signal was lost in CDKN2A knockout cells. Wild-type and CDKN2A knockout samples were subjected to SDS-PAGE. Ab185620 and ab9484 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-CDKN2A/p14ARF antibody [EPR17878] (ab185620)

All lanes : Anti-CDKN2A/p14ARF antibody [EPR17878] (ab185620) at 1/5000 dilution

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate transfected with empty vector (vector control)

Lane 2: HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate transfected with CDKN2A/p14ARF with His-tag

Lysates/proteins at 10 µg per lane.

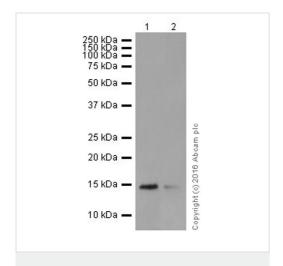
Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 14 kDa

Exposure time: 1 second

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-CDKN2A/p14ARF antibody [EPR17878] (ab185620)

All lanes : Anti-CDKN2A/p14ARF antibody [EPR17878] (ab185620) at 1/1000 dilution

Lane 1 : PC-3 (Human prostate adenocarcinoma cell line) whole cell lysate

Lane 2: HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$ at 1/100000 dilution

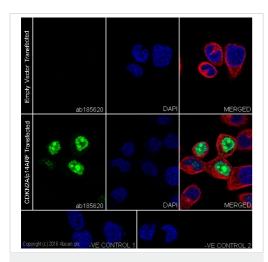
Predicted band size: 14 kDa Observed band size: 14 kDa

Exposure time: 3 minutes

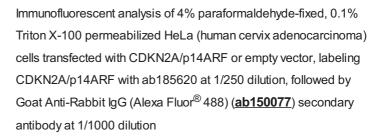
Blocking/Dilution buffer: 5% NFDM/TBST.

The expression level of p14 ARF is relatively low in most cell types and will be induced by oncogene expression. (PMID: 9694807;

PMID: 9694806).



Immunocytochemistry/ Immunofluorescence - Anti-CDKN2A/p14ARF antibody [EPR17878] (ab185620)



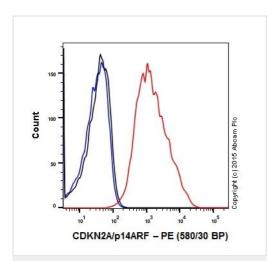
The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) at 1/1000 dilution and Goat Anti-Mouse lgG H&L (Alexa Fluor® 594) preadsorbed (ab150120) at 1/1000 dilution (red).

The negative controls are as follows:-

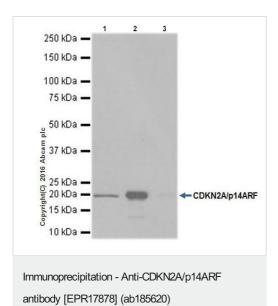
-ve control 1: ab185620 at 1/250 dilution followed by <u>ab150120</u> at 1/1000 dilution.

-ve control 2: $\underline{ab7291}$ at 1/1000 dilution followed by $\underline{ab150077}$ at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-CDKN2A/p14ARF antibody [EPR17878] (ab185620)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa (Human epithelial cell line from cervix adenocarcinoma) cells transfected with CDKN2A/p14ARF-GFP labeling CDKN2A/p14ARF with ab185620 at 1/120 dilution (red) compared with a Rabbit lgG,monoclonal [EPR25A] - Isotype Control (ab172730) (black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti Rabbit lgG (PE) at 1/150 dilution was used as the secondary antibody.



CDKN2A/p14ARF was immunoprecipitated from 1mg of CDKN2A/p14ARF transfected HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate with ab185620 at 1/80 dilution.

Western blot was performed from the immunoprecipitate using ab185620 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10000 dilution.

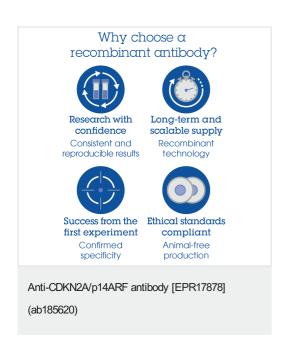
Lane 1: CDKN2A/p14ARF transfected HeLa whole cell lysate, 10µg (Input).

Lane 2: ab185620 IP in CDKN2A/p14ARF transfected HeLa whole cell lysate.

Lane 3: Rabbit lgG,monoclonal[EPR25A] - Isotype Control (ab172730) instead of ab185620 in CDKN2A/p14ARF transfected HeLa whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 1 second.



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