

Anti-Cdk4 antibody [EPR2513Y] ab68266

重组 RabMAb

19 References [5 图像](#)

概述

产品名称	Anti-Cdk4抗体[EPR2513Y]
描述	兔单克隆抗体[EPR2513Y] to Cdk4
宿主	Rabbit
经测试应用	适用于: Flow Cyt (Intra), ICC/IF, WB, IP 不适用于: IHC-P
种属反应性	与反应: Mouse, Rat, Human
免疫原	Synthetic peptide corresponding to Human Cdk4 aa 1-100 (N terminal).
阳性对照	WB: HeLa, Ramos, and K562 cell lysates. Rat and mouse lung tissue lysates. ICC/IF: MCF7 cells. Flow Cyt (intra) (Intra): A549 cells. IP: K562 whole cell lysate.
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: <ul style="list-style-type: none"> - 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. 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: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.5% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR2513Y

同种型

IgG

应用

The Abpromise guarantee **Abpromise™** 承诺保证使用 ab68266 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)		1/500. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		1/100.
WB		1/500 - 1/1000. Detects a band of approximately 34 kDa (predicted molecular weight: 34 kDa).
IP		1/30.

应用说明

Is unsuitable for IHC-P.

靶标

功能

Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complexes and the subsequent transcription of E2F target genes which are responsible for the progression through the G(1) phase. Hypophosphorylates RB1 in early G(1) phase. Cyclin D-CDK4 complexes are major integrators of various mitogenic and antimitogenic signals. Also phosphorylates SMAD3 in a cell-cycle-dependent manner and represses its transcriptional activity. Component of the ternary complex, cyclin D/CDK4/CDKN1B, required for nuclear translocation and activity of the cyclin D-CDK4 complex.

疾病相关

Defects in CDK4 are a cause of susceptibility to cutaneous malignant melanoma type 3 (CMM3) [MIM:609048]. Malignant melanoma is a malignant neoplasm of melanocytes, arising de novo or from a pre-existing benign nevus, which occurs most often in the skin but also may involve other sites.

序列相似性

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily.
Contains 1 protein kinase domain.

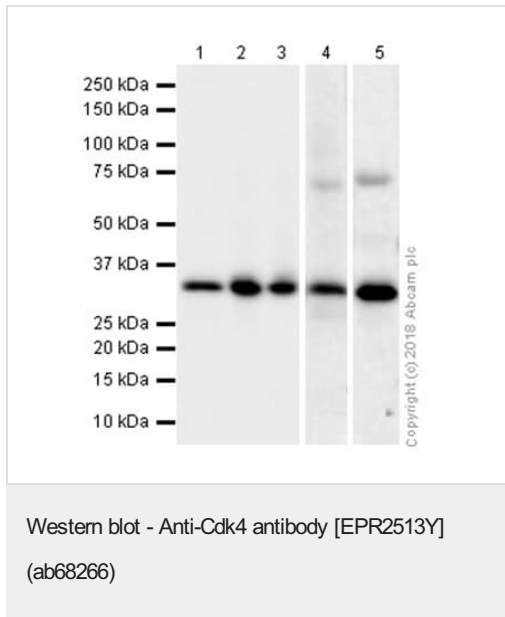
翻译后修饰

Phosphorylation at Thr-172 is required for enzymatic activity. Phosphorylated, in vitro, at this site by CCNH-CDK7, but, in vivo, appears to be phosphorylated by a proline-directed kinase. In the cyclin D-CDK4-CDKN1B complex, this phosphorylation and consequent CDK4 enzyme activity, is dependent on the tyrosine phosphorylation state of CDKN1B. Thus, in proliferating cells, CDK4 within the complex is phosphorylated on Thr-172 in the T-loop. In resting cells, phosphorylation on Thr-172 is prevented by the non-tyrosine-phosphorylated form of CDKN1B.

细胞定位

Cytoplasm. Nucleus. Membrane. Cytoplasmic when non-complexed. Forms a cyclin D-CDK4 complex in the cytoplasm as cells progress through G(1) phase. The complex accumulates on the nuclear membrane and enters the nucleus on transition from G(1) to S phase. Also present in

图片



All lanes : Anti-Cdk4 antibody [EPR2513Y] (ab68266) at 1/2000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2 : K562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate

Lane 3 : Ramos (Human Burkitt's lymphoma B lymphocyte) whole cell lysate

Lane 4 : Rat lung lysate

Lane 5 : Mouse lung lysate

Lysates/proteins at 20 µg per lane.

Secondary

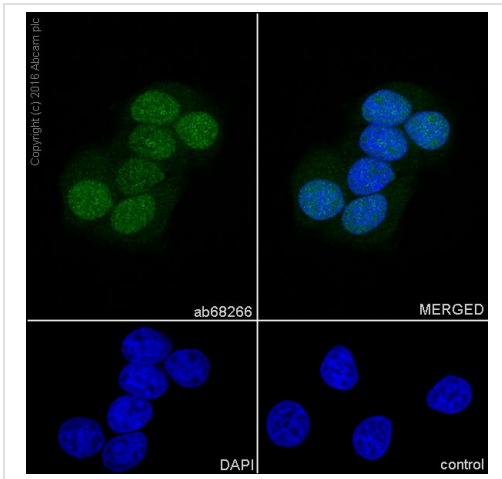
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/20000 dilution

Predicted band size: 34 kDa

Additional bands at: 34 kDa. We are unsure as to the identity of these extra bands.

Exposure times: Lane 1-3: 30 secs; Lane 4-5: 180 secs.

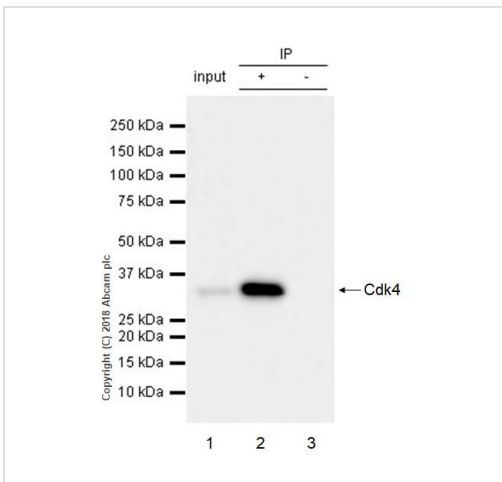
Blocking/Dilution buffer: 5% NFDm/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-Cdk4 antibody [EPR2513Y] (ab68266)

Immunocytochemistry/ Immunofluorescence analysis of MCF7 (Human breast adenocarcinoma epithelial cell) cells labeling Cdk4 with ab68266 at 1:100 (5.4 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% triton X-100. Goat anti rabbit IgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1:1000 (2 µg/ml) dilution. DAPI nuclear counterstain.

PBS instead of the primary antibody was used as the secondary antibody only control.



Immunoprecipitation - Anti-Cdk4 antibody [EPR2513Y] (ab68266)

ab68266 at 1:30 dilution (2 µg) immunoprecipitating Cdk4 in K562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate.

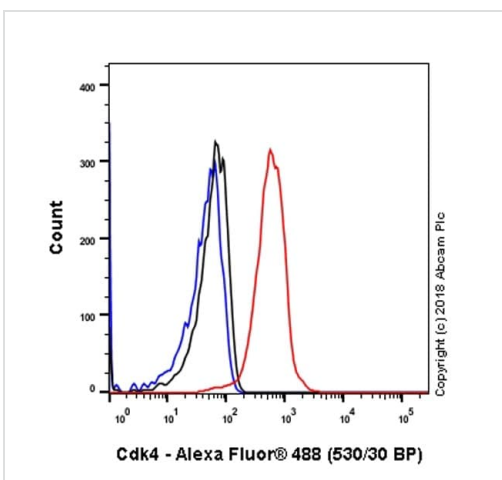
Lane 1 (input): K562 whole cell lysate 10 µg

Lane 2 (+): ab68266 & K562 whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab68266 in K562 whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (**ab131366**) was used for detection at 1:1000 dilution.

Blocking and diluting buffer: 5% NFDm/TBST.



Flow Cytometry (Intracellular) - Anti-Cdk4 antibody [EPR2513Y] (ab68266)

Intracellular Flow Cytometry analysis of A549 (Human lung carcinoma epithelial cell) cells labeling Cdk4 with ab68266 at 1/50 dilution (1 µg/ml) (red). Cells were fixed with 4% Paraformaldehyde. A Goat anti rabbit IgG (Alexa Fluor® 488) secondary antibody was used at 1/2000 dilution. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).

Why choose a recombinant antibody?

Research with confidence
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Recombinant technology

Success from the first experiment
Confirmed specificity

Ethical standards compliant
Animal-free production

Anti-Cdk4 antibody [EPR2513Y] (ab68266)

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