


Anti-Cdk4 antibody ab137675

★★★★★ [1 Abreviews](#) [70 References](#) [8 图像](#)

概述

产品名称	Anti-Cdk4抗体
描述	兔多克隆抗体to Cdk4
宿主	Rabbit
经测试应用	适用于: WB, ICC/IF, IHC-P
种属反应性	与反应: Mouse, Rat, Human 预测可用于: Pig 
免疫原	Recombinant fragment corresponding to Human Cdk4 aa 148-303. Database link: P11802
阳性对照	WB: NIH/3T3, HEK-293T, HeLa, PC-12 whole cell lysates. Epithelial OVCAR whole cell lysate. ICC/IF: HeLa and MCF7 cells. IHC-P: Human gastric carcinoma tissue.
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

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 or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.00 Preservative: 0.025% Proclin 300 Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)
纯度	Immunogen affinity purified
克隆	多克隆
同种型	IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab137675于以下的经测试应用

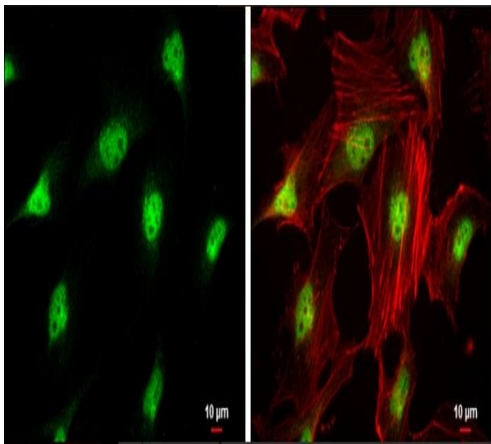
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB	★★★★★ (1)	1/500 - 1/3000. Predicted molecular weight: 34 kDa.
ICC/IF		1/100 - 1/1000.
IHC-P		1/100 - 1/1000.

靶标

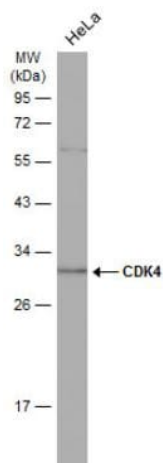
功能	Ser/Thr-kinase component of cyclin D-CDK4 (DC) complexes that phosphorylate and inhibit members of the retinoblastoma (RB) protein family including RB1 and regulate the cell-cycle during G(1)/S transition. Phosphorylation of RB1 allows dissociation of the transcription factor E2F from the RB/E2F complexes 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 nucleoli and heterochromatin lumps. Colocalizes with RB1 after release into the nucleus.

图片



Immunocytochemistry/ Immunofluorescence - Anti-Cdk4 antibody (ab137675)

HeLa cells stained for CDK4 (green) using ab137675 at 1/500 dilution in ICC/IF.

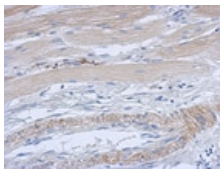


Anti-Cdk4 antibody (ab137675) at 1/1000 dilution + HeLa whole cell extract at 30 μ g

Predicted band size: 34 kDa

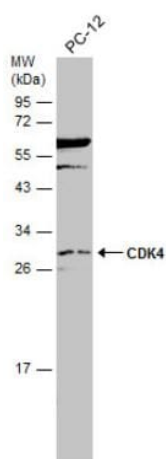
12% SDS-PAGE

Western blot - Anti-Cdk4 antibody (ab137675)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Cdk4 antibody (ab137675)

Immunohistochemical analysis of paraffin-embedded Human gastric carcinoma tissue, labelling Cdk4 using ab137675 at 1/500 dilution.

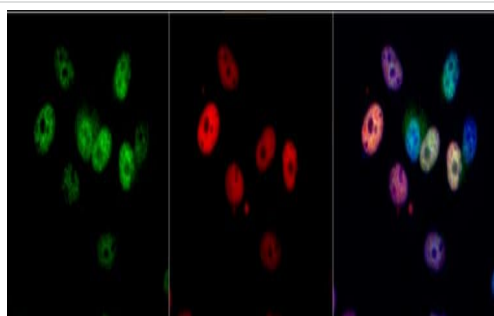


Western blot - Anti-Cdk4 antibody (ab137675)

Anti-Cdk4 antibody (ab137675) at 1/500 dilution + PC-12 whole cell extract at 30 μ g

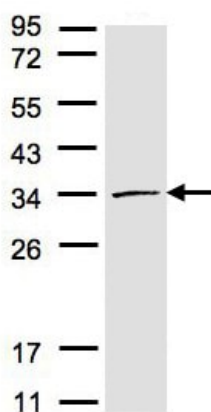
Predicted band size: 34 kDa

12% SDS-PAGE



Immunocytochemistry/ Immunofluorescence - Anti-Cdk4 antibody (ab137675)

MCF7 cells stained for CDK4 (green) using ab137675 at 1/1000 dilution in ICC/IF. Red staining of p21 Cip1 (a nucleus marker) at 1/500 dilution and Hoechst 33342 (blue) staining.

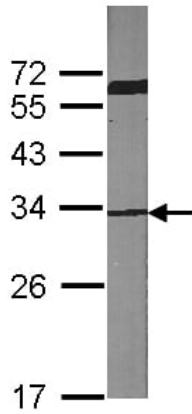


Western blot - Anti-Cdk4 antibody (ab137675)

Anti-Cdk4 antibody (ab137675) at 1/1000 dilution + HEK-293T whole cell lysate at 30 μ g

Predicted band size: 34 kDa

12% SDS PAGE

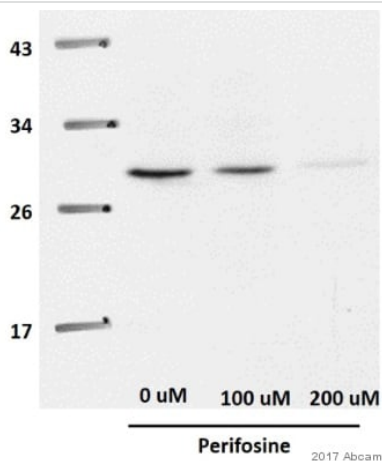


Western blot - Anti-Cdk4 antibody (ab137675)

Anti-Cdk4 antibody (ab137675) at 1/1000 dilution + NIH/3T3 whole cell lysate at 30 µg

Predicted band size: 34 kDa

12% SDS PAGE



Western blot - Anti-Cdk4 antibody (ab137675)

This image is courtesy of an anonymous Abreview.

All lanes : Anti-Cdk4 antibody (ab137675) at 1/1000 dilution

Lane 1 : Epithelial OVCAR whole cell lysate - untreated

Lane 2 : Epithelial OVCAR whole cell lysate treated with 100µM Perifosine for 24 hours

Lane 3 : Epithelial OVCAR whole cell lysate treated with 200µM Perifosine for 24 hours

Lysates/proteins at 100 µg per lane.

Secondary

All lanes : HRP-conjugated goat anti-rabbit IgG at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 34 kDa

Observed band size: 30 kDa

Exposure time: 5 minutes

10% SDS-PAGE.

Blocked with 5% milk for 12 hours at 4°C.

Incubated with the primary antibody in 2% milk for 12 hours at 4°C.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.cn/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors