


Anti-Cdk4 antibody ab95255

敲除 验证

[1 References](#) [2 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
种属反应性	与反应: Human 预测可用于: Pig 
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	This antibody gave a positive signal in both MCF7 and HeLa whole cell lysates.
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	<p>pH: 7.40</p> <p>Preservative: 0.02% Sodium azide</p> <p>Constituent: PBS</p> <p>Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.</p>
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ab95255于以下的经测试应用

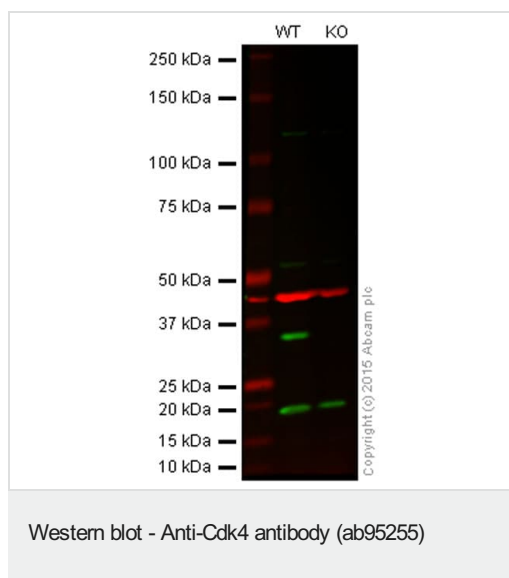
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		Use a concentration of 1 µg/ml. Detects a band of approximately 33 kDa (predicted molecular weight: 33 kDa).

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

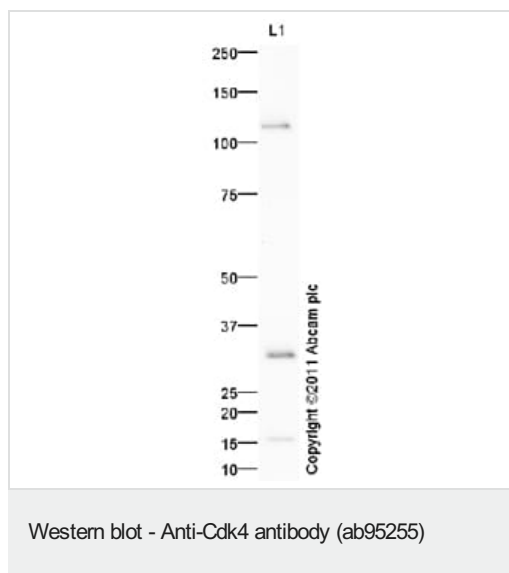


Lanes 1: Wild-type HAP1 cell lysate (20 µg)

Lanes 2: CDK4 knockout HAP1 cell lysate (20 µg)

Lanes 1 and 2: Merged (red and green) signal. Green signal from target – ab95255 observed at 34 kDa. Red signal from loading control – **ab8226** observed at 42 kDa

ab95255 was shown to react with CDK4 when CDK4 knockout samples were used, along with additional cross-reactive bands. Wild-type and CDK4 knockout samples were subjected to SDS-PAGE. ab95255 and **ab8226** (loading control to beta actin) were diluted 1 µg/mL and 1/2000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed **ab216776** secondary antibodies at 1/10 000 dilution for 1 h at room temperature before imaging.



Anti-Cdk4 antibody (ab95255) at 1 µg/ml + MCF7 (Human breast adenocarcinoma cell line) Whole Cell Lysate at 10 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (**ab97080**) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 33 kDa

Observed band size: 33 kDa

Additional bands at: 110 kDa, 16 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 20 minutes

A positive signal was also observed within HeLa whole cell lysate. Abcam recommends using milk as the blocking agent. Abcam welcomes customer feedback and would appreciate any comments regarding this product and the data presented above.

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