# abcam

## Product datasheet

## Anti-Chk2 antibody [EPR5528] ab133505





RabMAb

1 References 5 图像

## 概述

产品名称 Anti-Chk2抗体[EPR5528]

**描述** 兔单克隆抗体[EPR5528] to Chk2

**宿主** Rabbit

经测试应用 适用于: WB

不适用于: Flow Cyt,ICC/IF,IHC-P or IP

种属反应性 与反应: Human

免疫原 Synthetic peptide within Human Chk2 aa 1-100 (N terminal). The exact sequence is proprietary.

阳性对照 SH-SY5Y, HeLa, HT29 and 293T cell lysates.

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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

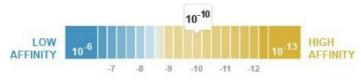
these species. Please contact us for more information.

## 性能

形式 Liquid

**存放说明** Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

**解离常数(K\_D)**  $K_D = 1.02 \times 10^{-10} M$ 



Learn more about K<sub>D</sub>

**存储溶液** pH: 7.2

Preservative: 0.05% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture

supernatant

纯度 Tissue culture supernatant

**克隆** 单克隆

**克隆编号** EPR5528

**同种型** IgG

#### 应用

The Abpromise guarantee Abpromise™承诺保证使用ab133505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 <b>明</b>
WB		Use at an assay dependent dilution. Detects a band of approximately 61 kDa (predicted molecular weight: 61 kDa).

应用说明 Is unsuitable for Flow Cyt,ICC/IF,IHC-P or IP.

靶标

功能 Regulates cell cycle checkpoints and apoptosis in response to DNA damage, particularly to DNA

double-strand breaks. Inhibits CDC25C phosphatase by phosphorylation on 'Ser-216', preventing the entry into mitosis. May also play a role in meiosis. Regulates the TP53 tumor suppressor

through phosphorylation at 'Thr-18' and 'Ser-20'.

组织特异性 High expression is found in testis, spleen, colon and peripheral blood leukocytes. Low expression

is found in other tissues.

疾病相关 Defects in CHEK2 are associated with Li-Fraumeni syndrome 2 (LFS2) [MIM:609265]; a highly

penetrant familial cancer phenotype usually associated with inherited mutations in p53/TP53. Defects in CHEK2 may be a cause of susceptibility to prostate cancer (PC) [MIM:176807]. It is a malignancy originating in tissues of the prostate. Most prostate cancers are adenocarcinomas that develop in the acini of the prostatic ducts. Other rare histopathologic types of prostate cancer that occur in approximately 5% of patients include small cell carcinoma, mucinous carcinoma, prostatic ductal carcinoma, transitional cell carcinoma, squamous cell carcinoma, basal cell carcinoma, adenoid cystic carcinoma (basaloid), signet-ring cell carcinoma and neuroendocrine

carcinoma.

Defects in CHEK2 are found in some patients with osteogenic sarcoma (OSRC) [MIM:259500].

序列相似性 Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CHK2 subfamily.

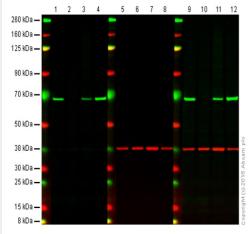
Contains 1 FHA domain.

Contains 1 protein kinase domain.

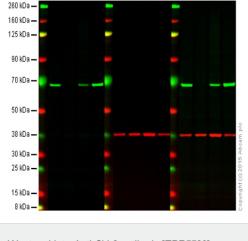
翻译**后修**饰 Phosphorylated by PLK4.

细胞定位 Nucleus; Nucleus. Isoform 10 is present throughout the cell and Nucleus > PML body. Nucleus >

nucleoplasm. Recruited into PML bodies together with TP53.



Western blot - Anti-Chk2 antibody [EPR5528] (ab133505)



respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed ab216776 secondary antibodies at 1/10000 dilution

Lanes 1, 5 and 9: Wild-type HAP1 cell lysate (20 µg)

Lanes 3, 7 and 11: HeLa cell lysate (20 µg)

for 1 h at room temperature before imaging.

observed at 62 kDa

observed at 37 kDa

Lanes 4, 8 and 12: HEK293 cell lysate (20 µg)

Lanes 2, 6 and 10: Chk2 knockout HAP1 cell lysate (20 µg)

Lanes 1, 2, 3 and 4: Green signal from target - ab133505

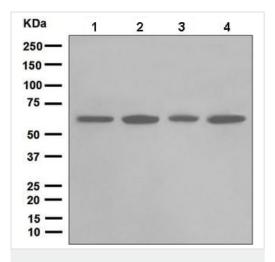
Lanes 9, 10, 11 and 12: Merged (red and green) signal

Lanes 5, 6, 7 and 8: Red signal from loading control - ab8245

ab133505 was shown to specifically react with Chk2 when Chk2

knockout samples were used. Wild-type and Chk2 knockout samples were subjected to SDS-PAGE. ab133505 and ab8245

(loading control to GAPDH) were diluted 1/10000 and 1/2000



Western blot - Anti-Chk2 antibody [EPR5528] (ab133505)

All lanes: Anti-Chk2 antibody [EPR5528] (ab133505) at 1/10000 dilution

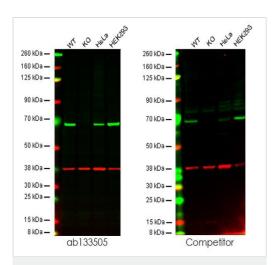
Lane 1: SH-SY5Y lysate Lane 2: HeLa lysate Lane 3: HT29 lysate Lane 4: 293T cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

All lanes: Goat-anti-rabbit HRP at 1/2000 dilution

Predicted band size: 61 kDa Observed band size: 61 kDa



Western blot - Anti-Chk2 antibody [EPR5528] (ab133505)

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

Lanes 2: Chk2 knockout HAP1 cell lysate (20 µg)

Lanes 3: HeLa cell lysate (20 µg)

Lanes 4: HEK293 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green -

ab133505 observed at 64 kDa. Red - loading control, <u>ab8245</u>,

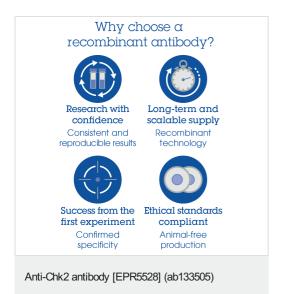
observed at 37 kDa.

This western blot image is a comparison between ab133505 and a competitor's rabbit polyclonal antibody.

OI-RD Scanning - Anti-Chk2 antibody [EPR5528] (ab133505)

Equilibrium disassociation constant ( $K_D$ ) Learn more about  $K_D$ 

Click here to learn more about K<sub>D</sub>



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