# abcam

# Product datasheet

# Anti-Chk2 antibody [EPR19236] ab199031



重组 RabMAb

# 6 图像

#### 概述

产品名称 Anti-Chk2抗体[EPR19236]

描述 兔单克隆抗体[EPR19236] to Chk2

宿主 Rabbit

经测试应用 适用于: IHC-P, WB, IP

种属反应性 与反应: Mouse

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Mouse spleen and colon lysates; NIH/3T3, C2C12 and bEND.3 whole cell lysates. IHC:

Mouse spleen and testis tissue.

This product is a recombinant monoclonal antibody, which offers several advantages including: 常规说明

- 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: 7.2

Preservative: 0.01% Sodium azide

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

纯度 Protein A purified

克隆 单克降

克隆编号 EPR19236

同种型 ΙgG

#### The Abpromise guarantee

# Abpromise™承诺保证使用ab199031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
IHC-P		1/500. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB		1/1000. Detects a band of approximately 61 kDa (predicted molecular weight: 61 kDa).
IP		1/40.

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]. 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

序列相似性

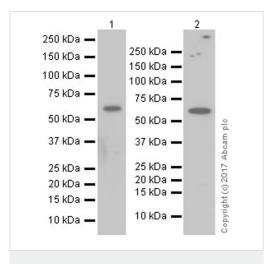
Phosphorylated by PLK4.

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.

#### 图片



Western blot - Anti-Chk2 antibody [EPR19236] (ab199031)

**All lanes :** Anti-Chk2 antibody [EPR19236] (ab199031) at 1/1000 dilution

Lane 1 : C2C12 (mouse myoblast cell line) whole cell lysateLane 2 : bEND.3 (mouse brain endothelioma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

#### **Secondary**

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/50000 dilution

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

Exposure time: 15 seconds

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

Chk2 was immunoprecipitated from 0.35 mg of NIH/3T3 (mouse embyro fibroblast cell line) whole cell lysate with ab199031 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab199031 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/1000 dilution.

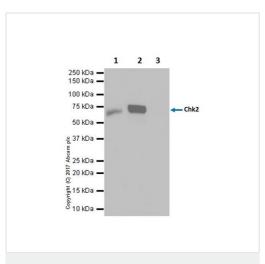
Exposure time 3 minutes.

Lane 1: NIH/3T3 whole cell lysate 10 µg (Input).

Lane 2: ab199031 IP in NIH/3T3 whole cell lysate.

Lane 3: Rabbit monoclonal  $\lg G$  ( $\frac{ab172730}{}$ ) instead of ab199031 in NIH/3T3 whole cell lysate.

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



Immunoprecipitation - Anti-Chk2 antibody [EPR19236] (ab199031)

All lanes: Anti-Chk2 antibody [EPR19236] (ab199031) at 1/1000

dilution

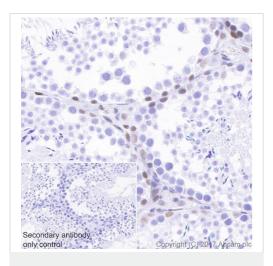
#### All lanes:

#### Secondary

**All lanes :** VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>) at 1/1000 dilution

Observed band size: 61 kDa

Exposure time: 3 minutes



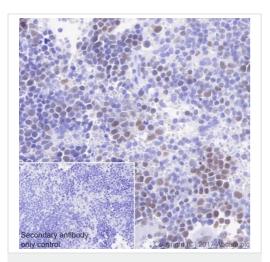
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Chk2 antibody
[EPR19236] (ab199031)

Immunohistochemical analysis of paraffin-embedded mouse testis tissue labeling Chk2 with ab199031 at 1/500 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (ab209101, ready to use). Nuclear staining on spermatogonia of mouse testis is observed (PMID: 12192050, 11593395). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB <u>ab209101</u>, ready to use.

Nuclear staining on spermatogonia of mouse testis (PMID: 12192050, PMID: 11593395).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



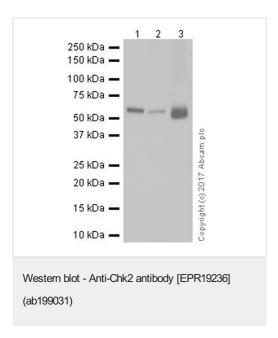
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Chk2 antibody
[EPR19236] (ab199031)

Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling Chk2 with ab199031 at 1/500 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (ab209101, ready to use). Nuclear staining on mouse spleen is observed (PMID: 12192050, 11593395). Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Rabbit specific IHC polymer detection kit HRP/DAB <u>ab209101</u>, ready to use.

Nuclear staining on mouse spleen (PMID: 12192050, PMID: 11593395).

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



**All lanes :** Anti-Chk2 antibody [EPR19236] (ab199031) at 1/1000 dilution

Lane 1 : Mouse spleen tissue lysate

Lane 2 : Mouse colon tissue lysate

Lane 3: NIH/3T3 (mouse embyro fibroblast cell line) whole cell

lysate

Lysates/proteins at 20 µg per lane.

# Secondary

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

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

Exposure time: 3 minutes

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



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

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