# abcam

# Product datasheet

# Anti-Chk2 antibody [EPR19236] - BSA and Azide free ab271961

ארבוע RabMAb

# 画像数 4

#### 製品の概要

製品名 Anti-Chk2 antibody [EPR19236] - BSA and Azide free

製品の詳細 Rabbit monoclonal [EPR19236] to Chk2 - BSA and Azide free

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, IP

種交差性 交差種: Mouse

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

ポジティブ・コントロール WB: Mouse spleen and colon lysates; NIH/3T3, C2C12 and bEND.3 whole cell lysates. IHC:

Mouse spleen and testis tissue.

ab271961 is the carrier-free version of ab199031. 特記事項

> Our carrier-free antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cellbased assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our conjugation kits for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc.

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

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C. Do Not Freeze.

バッファー pH: 7.2

Constituent: PBS

キャリア・フリー はい

精製度 Protein A purified

ポリモノ モノクローナル クローン名 EPR19236

アイソタイプ lqG

#### アプリケーション

Abpromise保証は、次のテスト済みアプリケーションにおけるab271961の使用に適用されます The Abpromise guarantee アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
WB		Use at an assay dependent concentration. Detects a band of approximately 61 kDa (predicted molecular weight: 61 kDa).
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
IP		Use at an assay dependent concentration.

# ターゲット情報

機能 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'.

組織特異性 High expression is found in testis, spleen, colon and peripheral blood leukocytes. Low expression

is found in other tissues.

関連疾患 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].

配列類似性 Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CHK2 subfamily.

Contains 1 FHA domain.

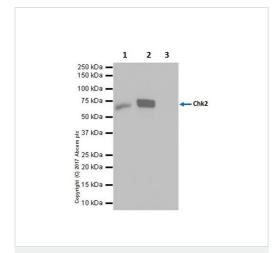
Contains 1 protein kinase domain.

Phosphorylated by PLK4.

Nucleus; Nucleus. Isoform 10 is present throughout the cell and Nucleus > PML body. Nucleus > nucleoplasm. Recruited into PML bodies together with TP53.

翻訳後修飾細胞内局在

#### 画像



Immunoprecipitation - Anti-Chk2 antibody [EPR19236] - BSA and Azide free (ab271961) Chk2 was immunoprecipitated from 0.35 mg of NIH/3T3 (mouse embyro fibroblast cell line) whole cell lysate with <u>ab199031</u> at 1/40 dilution. Western blot was performed from the immunoprecipitate using <u>ab199031</u> at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/1000 dilution.

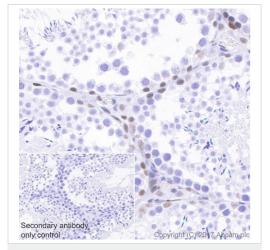
Exposure time 3 minutes.

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

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

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

Blocking and dilution buffer and concentration: 5% NFDM/TBST. This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab199031).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Chk2 antibody

[EPR19236] - BSA and Azide free (ab271961)

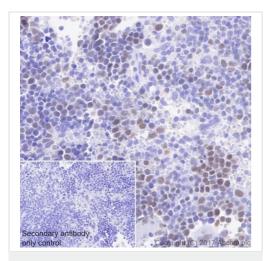
Immunohistochemical analysis of paraffin-embedded mouse testis tissue labeling Chk2 with <u>ab199031</u> at 1/500 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>, ready to use). Nuclear staining on spermatogonia of mouse testis is observed (PMID: 12192050, 11593395).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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab199031).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Chk2 antibody
[EPR19236] - BSA and Azide free (ab271961)

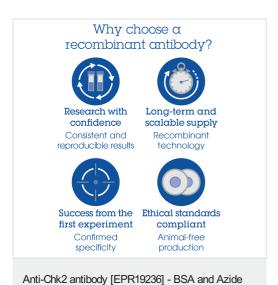
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue labeling Chk2 with <u>ab199031</u> at 1/500 dilution, followed by Rabbit specific IHC polymer detection kit HRP/DAB (<u>ab209101</u>, ready to use). Nuclear staining on mouse spleen is observed (PMID: 12192050, 11593395). Counter stained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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (<u>ab199031</u>).



free (ab271961)

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 <a href="https://www.abcam.co.jp/abpromise">https://www.abcam.co.jp/abpromise</a> or contact our technical team.

# Terms and conditions

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