

Anti-PBK/SPK antibody [EPR21982] ab236871

敲除验证
重组
RabMAb

10 图像

概述

产品名称	Anti-PBK/SPK抗体[EPR21982]
描述	兔单克隆抗体[EPR21982] to PBK/SPK
宿主	Rabbit
特异性	IHC is recommended for human only.
经测试应用	适用于: Flow Cyt (Intra), WB, IHC-P, IP
种属反应性	与反应: Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Wild-type HAP1 cell lysate; HEK293T, HeLa, HepG2, A431, U-87 MG, C6 and PC-12 whole cell lysates; Rat testis lysate. IHC-P: Human testis, gastric cancer and esophagus tissues. Flow Cyt (intra): HeLa and HepG2 cells. IP: HeLa whole cell lysate.
常规说明	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</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 long term. Avoid freeze / thaw cycle.
存储溶液	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
纯度	Protein A purified
克隆	单克隆

克隆编号	EPR21982
同种型	IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab236871于以下的经测试应用

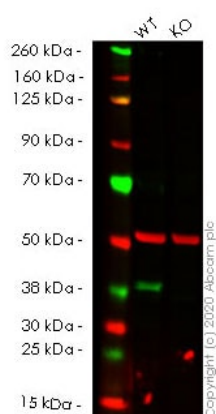
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/50.
WB		1/1000. Detects a band of approximately 38 kDa (predicted molecular weight: 36 kDa).
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. IHC is recommended for human only.
IP		1/30.

靶标

功能	Phosphorylates MAP kinase p38. Seems to be active only in mitosis. May also play a role in the activation of lymphoid cells. When phosphorylated, forms a complex with TP53, leading to TP53 destabilization and attenuation of G2/M checkpoint during doxorubicin-induced DNA damage.
组织特异性	Expressed in the testis and placenta. In the testis, restrictedly expressed in outer cell layer of seminiferous tubules.
序列相似性	Belongs to the protein kinase superfamily. Ser/Thr protein kinase family. MAP kinase kinase subfamily. Contains 1 protein kinase domain.
翻译后修饰	Phosphorylated; in a cell-cycle dependent manner at mitosis.

图片



Western blot - Anti-PBK/SPK antibody [EPR21982] (ab236871)

All lanes : Anti-PBK/SPK antibody [EPR21982] (ab236871) at 1/1000 dilution

Lane 1 : Wild-type HEK-293T cell lysate

Lane 2 : PBK knockout HEK-293T cell lysate

Lysates/proteins at 20 µg per lane.

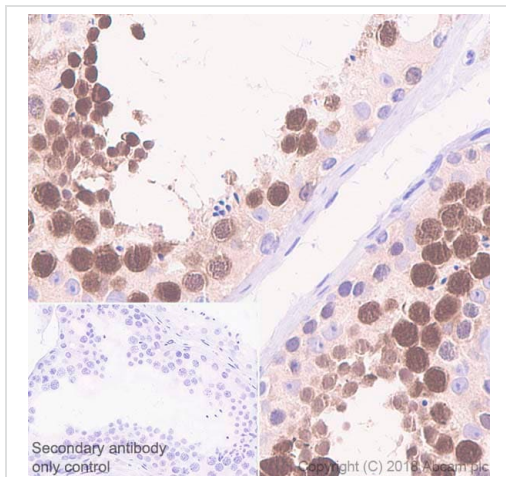
Performed under reducing conditions.

Predicted band size: 36 kDa

Observed band size: 40 kDa

Lanes 1- 2: Merged signal (red and green). Green - ab236871 observed at 40 kDa. Red - Anti-alpha Tubulin antibody [DM1A] - Loading Control ([ab7291](#)) observed at 50 kDa.

ab236871 was shown to react with PBK/SPK in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line [ab266827](#) (knockout cell lysate [ab257575](#)) was used. Wild-type HEK-293T and PBK knockout HEK-293T cell lysates were subjected to SDS-PAGE. ab236871 and Anti-alpha Tubulin antibody [DM1A] - Loading Control ([ab7291](#)) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. 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 in 20000 dilution for 1 hour at room temperature before imaging.

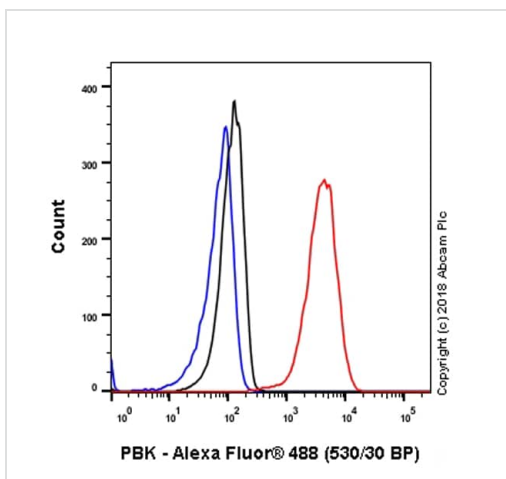


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PBK/SPK antibody [EPR21982] (ab236871)

Immunohistochemical analysis of paraffin-embedded human testis tissue labeling PBK/SPK with ab236871 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in germ cells of human testis (PMID:16982762; PMID:25909225) is observed. Counterstained with hematoxylin.

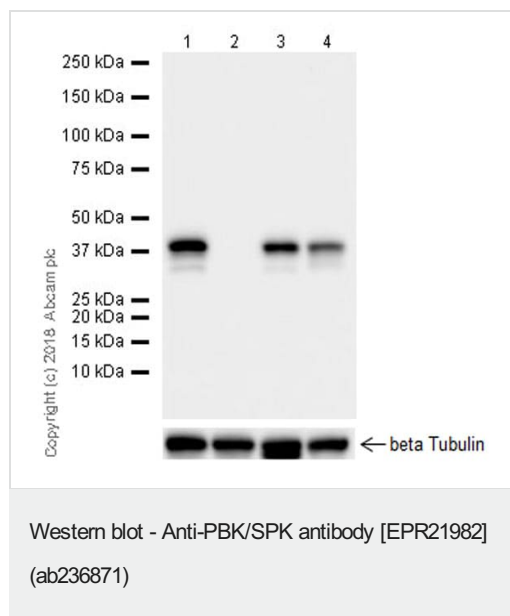
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).



Flow Cytometry (Intracellular) - Anti-PBK/SPK antibody [EPR21982] (ab236871)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized HeLa (human epithelial cell line from cervix adenocarcinoma) cell line labeling PBK/SPK with ab236871 at 1/50 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control ([ab172730](#)) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) at 1/2000 dilution was used as the secondary antibody.



All lanes : Anti-PBK/SPK antibody [EPR21982] (ab236871) at 1/1000 dilution

Lane 1 : Wild-type HAP1 cell lysate

Lane 2 : PBK/SPK knockout HAP1 cell lysate

Lane 3 : HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 4 : HepG2 (human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 36 kDa

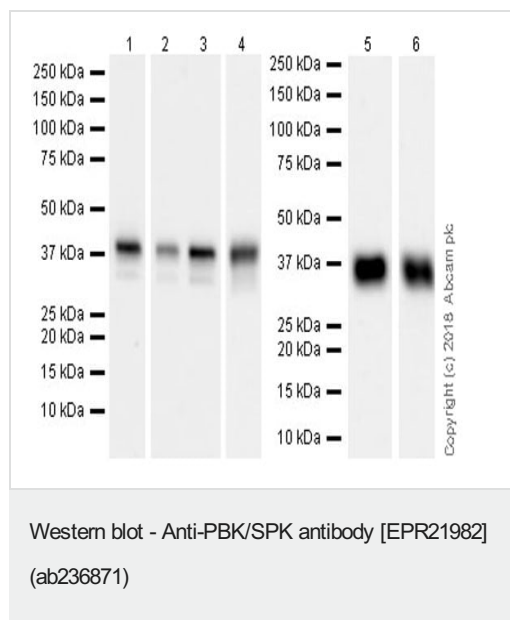
Observed band size: 38 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID:23547718; PMID:25909225).

ab236871 was shown to specifically react with PBK/SPK in wild-type HAP1 cells as signal was lost in PBK/SPK knockout cells. Wild-type and PBK/SPK knockout samples were subjected to SDS-PAGE. ab236871 and [ab181602](#) (Rabbit anti-GAPDH loading control) were incubated 1 hour at room temperature at 1/1000 dilution and 1/200,000 dilution respectively. Blots were developed with Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated ([ab97051](#)) secondary antibody at 1/100,000 dilution for 1 hour at room temperature before imaging.



All lanes : Anti-PBK/SPK antibody [EPR21982] (ab236871) at 1/1000 dilution

Lane 1 : SW480 (human colorectal adenocarcinoma cell line)

whole cell lysate at 20 µg

Lane 2 : A431 (human epidermoid carcinoma cell line) whole cell

lysate at 20 µg

Lane 3 : U-87 MG (human glioblastoma-astrocytoma epithelial cell

line) whole cell lysate at 20 µg

Lane 4 : Rat testis lysate at 20 µg

Lane 5 : C6 (rat glial tumor cell line) whole cell lysate at 10 µg

Lane 6 : PC-12 (rat adrenal gland pheochromocytoma cell line)

whole cell lysate at 10 µg

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at

1/100000 dilution

Predicted band size: 36 kDa

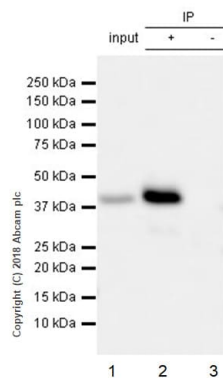
Observed band size: 38 kDa

Exposure time : Lanes 1-3: 26 seconds; Lane 4: 8 seconds;

Lanes 5-6: 70 seconds.

Blocking/Dilution buffer: 5% NFDM/TBST.

The molecular weight observed is consistent with what has been described in the literature (PMID:23547718; PMID:25909225).



Immunoprecipitation - Anti-PBK/SPK antibody
[EPR21982] (ab236871)

PBK/SPK was immunoprecipitated from 0.35 mg of HeLa (human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab236871 at 1/30 dilution. Western blot was performed from the immunoprecipitate using **ab184276** at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/5000 dilution.

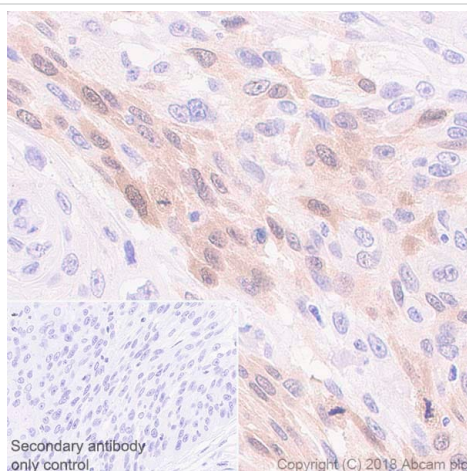
Lane 1: HeLa whole cell lysate 10 µg (Input).

Lane 2: **ab231871** IP in HeLa whole cell lysate.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of **ab231871** in HeLa whole cell lysate.

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

Exposure time: 30 seconds.

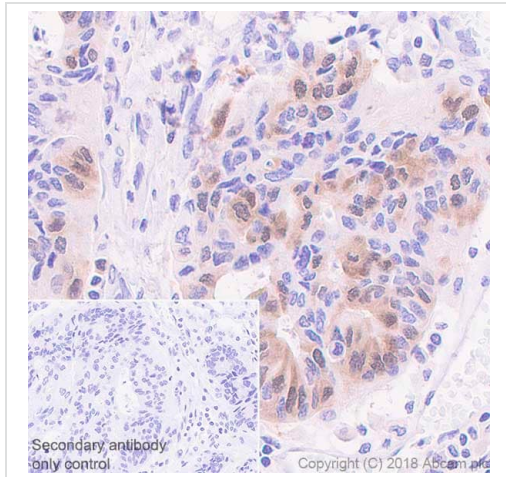


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PBK/SPK antibody
[EPR21982] (ab236871)

Immunohistochemical analysis of paraffin-embedded human esophagus cancer tissue labeling PBK/SPK with ab236871 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in human esophagus cancer (PMID: 27919968) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0).

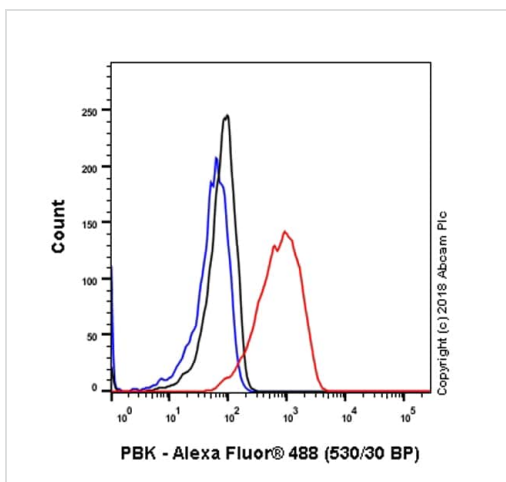


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PBK/SPK antibody [EPR21982] (ab236871)

Immunohistochemical analysis of paraffin-embedded human gastric cancer tissue labeling PBK/SPK with ab236871 at 1/2000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Positive staining in human gastric cancer (PMID:26894977; PMID:27898655) is observed. Counterstained with hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.





Heat mediated antigen retrieval using [ab93684](#) (Tris/EDTA buffer, pH 9.0).



Flow Cytometry (Intracellular) - Anti-PBK/SPK antibody [EPR21982] (ab236871)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed, 90% methanol-permeabilized HepG2 (human liver hepatocellular carcinoma cell line) cell line labeling PBK/SPK with ab236871 at 1/50 dilution (red) compared with a Rabbit IgG, monoclonal [EPR25A] - Isotype Control ([ab172730](#)) (black) and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (blue). Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) ([ab150077](#)) at 1/2000 dilution was used as the secondary antibody.

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-PBK/SPK antibody [EPR21982] (ab236871)

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

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