abcam

Product datasheet

Anti-Bak antibody [Y164] ab32371





重组 RabMAb

★★★★★ 3 Abreviews 57 References 12 图像

概述

产品名称 Anti-Bak抗体[Y164]

描述 兔单克隆抗体[Y164] to Bak

宿主 Rabbit

特异性 This antibody recognises Bak. The antibody does not cross-react with other Bcl2 members.

经测试应用 适用于: IP, Flow Cyt (Intra), WB, IHC-P

不适用于: ICC/IF

种属反应性 与反应: Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 WB: Recombinant Human Bak protein (ab114337), HAP1, HeLa and HEK-293 cell lysates;

> human heart and fetal heart lysates. IHC-P: Human pancreatic carcinoma, stomach carcinoma and normal stomach tissue. IP: HCT 116 and HeLa cell lysates. Flow Cyt (intra): HeLa cells.

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® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **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 +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

存储溶液

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.21% BSA

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 Y164

 同种型
 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab32371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
IP	**** <u>(1)</u>	Use at an assay dependent concentration.
Flow Cyt (Intra)		1/10 - 1/20. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/10000. Predicted molecular weight: 23 kDa. For unpurified use at 1/1000 - 1/5000.
IHC-P	****(1)	1/200. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

应用说明 Is unsuitable for ICC/IF.

靶标

功能 In the presence of an appropriate stimulus, accelerates programmed cell death by binding to, and

antagonizing the anti-apoptotic action of BCL2 or its adenovirus homolog E1B 19k protein. Low

micromolar levels of zinc ions inhibit the promotion of apoptosis.

组织特异性 Expressed in a wide variety of tissues, with highest levels in the heart and skeletal muscle.

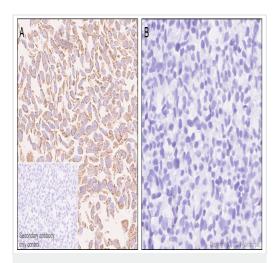
序列相似性 Belongs to the Bcl-2 family.

结**构域** Intact BH3 motif is required by BIK, BID, BAK, BAD and BAX for their pro-apoptotic activity and

for their interaction with anti-apoptotic members of the Bcl-2 family.

细**胞定位** Mitochondrion membrane.

图片



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Bak antibody [Y164] (ab32371)

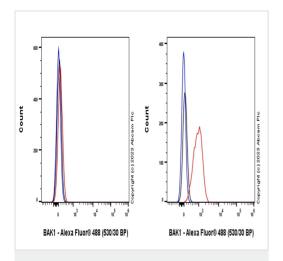
Immunohistochemical analysis of paraffin-embedded fixed (A) Wildtype HeLa (human cervix adenocarcinoma epithelial cell) cell pellet. (B) BAK1 knockout HeLa (<u>ab265277</u>) cell pellet staining Bak with ab32371 at 1/2000 dilution followed by a ready to use LeicaDS9800 (Bond™ Polymer Refine Detection). Counterstaining used was hematoxylin.

Positive staining on (A) Wild-type HeLa cell pellet, no staining on (B) BAK1 knockout HeLa (ab265277) cell pellet.

The section was incubated with ab32371 for 30 mins at room temperature.

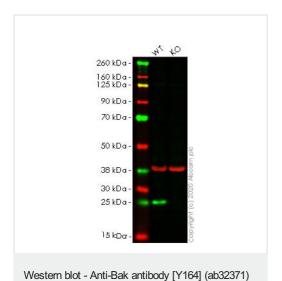
The immunostaining was performed on a Leica Biosystems BOND® RX instrument

Heat mediated antigen retrieval was performed with Tris-EDTA buffer (pH 9.0, Epitope Retrieval Solution2) for 20 mins.



Flow Cytometry (Intracellular) - Anti-Bak antibody [Y164] (ab32371)

Flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized BAK1 KO Hela (human BAK1 knockout cervical adenocarcinoma epithelial cell, Left) /Parental Hela (Right) cells labelling Bak with ab32371 at 1/500 dilution (0.1 µg)(Red) compared with a Rabbit monoclonal lgG (ab172730) (Black) isotype control and an unlabelled control (cells without incubation with primary antibody and secondary antibody) (Blue). Goat Anti-Rabbit lgG (Alexa Fluor® 488, ab150081) at 1/5000 dilution was used as the secondary antibody.



All lanes: Anti-Bak antibody [Y164] (ab32371) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: BAK1 knockout HeLa cell lysate

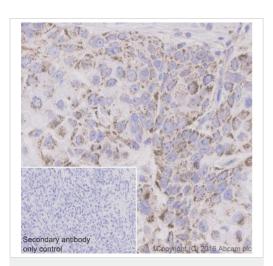
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 23 kDa **Observed band size:** 23 kDa

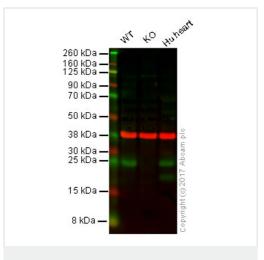
Lanes 1-2: Merged signal (red and green). Green - ab32371 observed at 23 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (ab8245) observed at 37 kDa.

ab32371 was shown to react with Bak in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line ab265277 (knockout cell lysate ab257077) was used. Wild-type HeLa and BAK1 knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab32371 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye®800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG 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 paraffinembedded sections) - Anti-Bak antibody [Y164] (ab32371)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human pancreatic carcinoma tissue sections labeling Bak with Purified ab32371 at 1:200 dilution (2.98 µg/ml). Heat mediated antigen retrieval was performed using **ab93684** (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. **ab97051** Goat Anti-Rabbit lgG H&L (HRP) secondary antibody was used at 1:500 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-Bak antibody [Y164] (ab32371)

All lanes: Anti-Bak antibody [Y164] (ab32371)

Lane 1: Wild-type HAP1 whole cell lysate

Lane 2: BAK knockout HAP1 whole cell lysate

Lane 3: Human Heart whole cell lysate

Lysates/proteins at 20 µg per lane.

Predicted band size: 23 kDa

Lanes 1 - 3: Merged signal (red and green). Green - ab32371 observed at 25 kDa. Red - loading control, <u>ab9484</u>, observed at 37 kDa.

Unpurified ab32371 was shown to specifically recognize BAK in wild-type HAP1 cells. No band was observed when BAK knockout cells were examined. Wild-type and BAK knockout samples were subjected to SDS-PAGE. Unpurified ab32371 and ab9484 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20,000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye®

680RD) preabsorbed $\underline{ab216776}$ secondary antibodies at 1/20,000 dilution for 1 hour at room temperature before imaging.

Immunoprecipitation - Anti-Bak antibody [Y164] (ab32371)

ab32371 (purified) at 1:20 dilution (2 μ g) immunoprecipitating Bak in HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate.

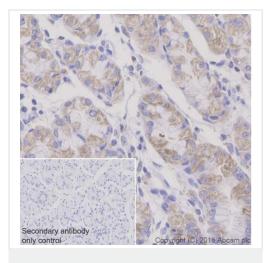
Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate $10\mu g$

Lane 2 (+): ab32371 & HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 3 (-): Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab32371 in HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate

For western blotting, VeriBlot for IP Detection Reagent (HRP) (ab131366) was used for detection at 1:1000 dilution.

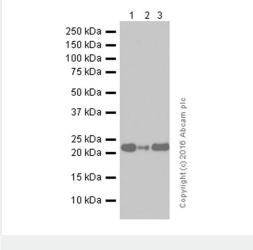
Blocking and diluting buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Bak antibody [Y164] (ab32371)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human stomach tissue sections labeling Bak with Purified ab32371 at 1:200 dilution (2.98 µg/ml). Heat mediated antigen retrieval was performed using ab93684 (Tris/EDTA buffer, pH 9.0). Tissue was counterstained with Hematoxylin. ab97051 Goat Anti-Rabbit IgG H&L (HRP)

secondary antibody was used at 1:500 dilution. PBS instead of the primary antibody was used as the negative control.



Western blot - Anti-Bak antibody [Y164] (ab32371)

All lanes : Anti-Bak antibody [Y164] (ab32371) at 1/10000 dilution (purified)

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

Lane 2: HEK-293 (Human embryonic kidney epithelial cell) whole cell lysates

Lane 3: Human fetal heart lysates

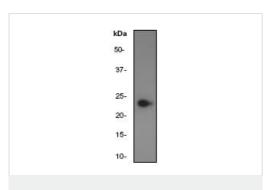
Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/2000 dilution

Predicted band size: 23 kDa **Observed band size:** 23 kDa

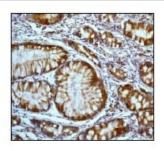
Blocking and diluting buffer: 5% NFDM/TBST



Western blot - Anti-Bak antibody [Y164] (ab32371)

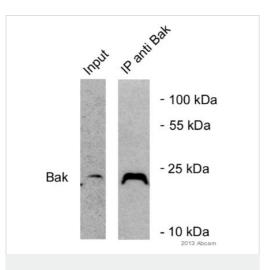
Anti-Bak antibody [Y164] (ab32371) at 1/5000 dilution (unpurified) + HeLa cell lysate

Predicted band size: 23 kDa **Observed band size:** 23 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Bak antibody [Y164] (ab32371)

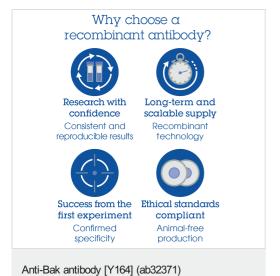
Immunohistochemical analysis of Bak expression in paraffin embedded human stomach carcinoma, using 1/250 unpurified ab32371.



Immunoprecipitation - Anti-Bak antibody [Y164] (ab32371)

Bak was immunoprecipitated from HCT116 p53-/- cell line whole cell lysate with unpurified ab32371 at 1/100 dilution.

Western blot was performed from the immunoprecipitate using ab32371 at 1/2000 dilution.



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