

## Product datasheet

### Anti-Bak antibody [AT38E2] $\alpha$ b104124

KO VALIDATED

★★★★☆ [2 Abreviews](#) [5 References](#) [6 Images](#)

#### Overview

<b>Product name</b>	Anti-Bak antibody [AT38E2]
<b>Description</b>	Mouse monoclonal [AT38E2] to Bak
<b>Host species</b>	Mouse
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt, WB, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Recombinant fragment corresponding to amino acids 29-187 of Human Bak, purified from E. coli.
<b>Positive control</b>	WB: Mouse lung lysate, 293T, HeLa, A431, A549, Jurkat, MCF7, and PC3 cell lysates ICC/IF: HeLa cells. Flow Cyt: HeLa cells.
<b>General notes</b>	<p>This product was changed from ascites to tissue culture supernatant on 24/01/2019. Please note that the dilutions may need to be adjusted accordingly. If you have any questions, please do not hesitate to contact our scientific support team.</p> <p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&amp;As</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	<p>pH: 7.40</p> <p>Preservative: 0.1% Sodium azide</p> <p>Constituent: PBS</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal

<b>Clone number</b>	AT38E2
<b>Isotype</b>	IgG2a
<b>Light chain type</b>	kappa

## Applications

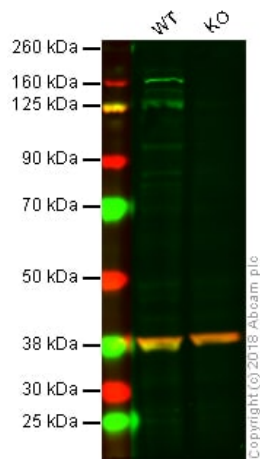
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab104124 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt		Use at an assay dependent concentration.
WB	★★★★★ (2)	Use at an assay dependent concentration. Predicted molecular weight: 23 kDa.
ICC/IF		Use at an assay dependent concentration.

## Target

<b>Function</b>	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.
<b>Tissue specificity</b>	Expressed in a wide variety of tissues, with highest levels in the heart and skeletal muscle.
<b>Sequence similarities</b>	Belongs to the Bcl-2 family.
<b>Domain</b>	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.
<b>Cellular localization</b>	Mitochondrion membrane.

## Images



Western blot - Anti-Bak antibody [AT38E2]  
(ab104124)

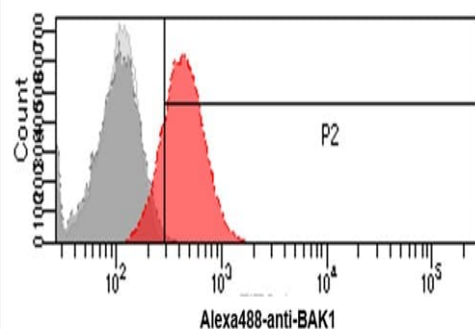
**Lane 1:** Wild-type HAP1 whole cell lysate (20 µg)

**Lane 2:** BAK knockout HAP1 whole cell lysate (20 µg)

**Lanes 1 - 2:** Merged signal (red and green). Green - ab104124 observed at 0 kDa. Red - loading control, **ab181602**, observed at 37 kDa.

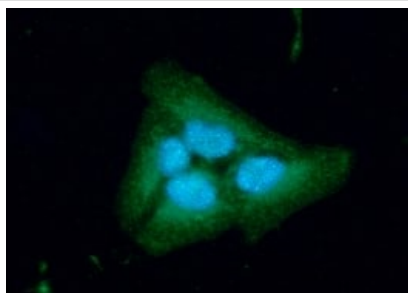
ab104124 was found to be non-specific when BAK knockout samples were used. Wild-type and BAK knockout samples were subjected to SDS-PAGE. Ab104124 and **ab181602** (Rabbit anti-GAPDH loading control) were incubated overnight at 4°C at 1/250 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Mouse IgG H&L (IRDye® 800CW) preabsorbed **ab216772** and Goat anti-Rabbit IgG H&L (IRDye® 680RD) preabsorbed **ab216777** secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

**This image was produced using the ascites version of this antibody.**



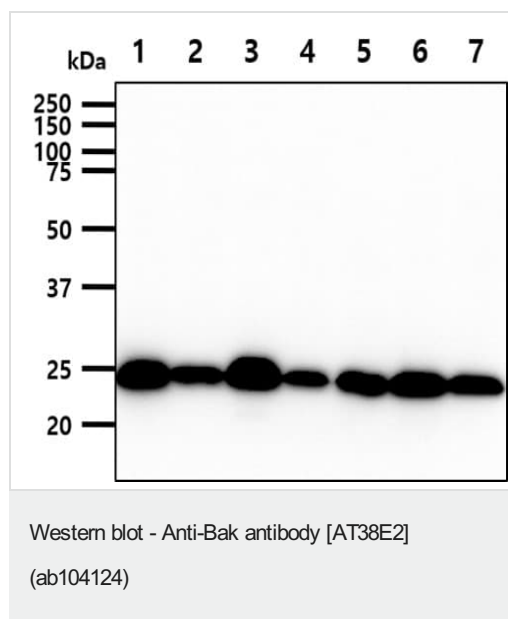
Flow Cytometry - Anti-Bak antibody [AT38E2]  
(ab104124)

Flow cytometry analysis of BAK in HeLa cells. The cell was stained with ab104124 at 2-5µg for 1x10<sup>6</sup> cells (red). A Goat anti mouse IgG (Alexa fluor 488) was used as the secondary antibody. Mouse monoclonal IgG was used as the isotype control (blue), cells without incubation with primary and secondary antibody was used as the negative control (black).



Immunocytochemistry/ Immunofluorescence - Anti-Bak antibody [AT38E2] (ab104124)

Immunocytochemistry/ Immunofluorescence analysis of BAK in HeLa cells. The cell was stained with ab104124 (1:100). The secondary antibody (green) was used Alexa Fluor 488. DAPI was stained the cell nucleus (blue).



**All lanes** : Anti-Bak antibody [AT38E2] (ab104124) at 1/1000 dilution

**Lane 1** : 293T cell lysate

**Lane 2** : HeLa cell lysate

**Lane 3** : A431 cell lysate

**Lane 4** : A549 cell lysate

**Lane 5** : Jurkat cell lysate

**Lane 6** : MCF7 cell lysate

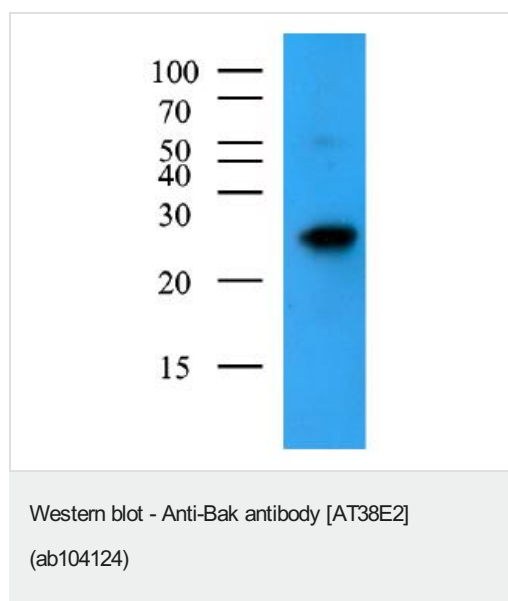
**Lane 7** : PC3 cell lysate

Lysates/proteins at 40 µg per lane.

### Secondary

**All lanes** : goat anti-mouse secondary antibody conjugated to HRP

**Predicted band size:** 23 kDa



Anti-Bak antibody [AT38E2] (ab104124) at 1/500 dilution + Mouse lung lysate at 35 µg

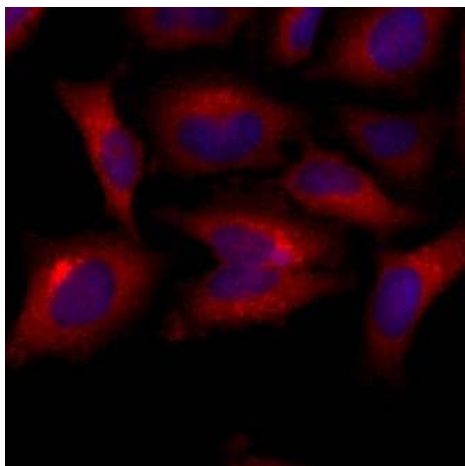
### Secondary

Goat anti-mouse HRP conjugate

Developed using the ECL technique.

**Predicted band size:** 23 kDa

**This image was produced using the ascites version of this antibody.**



Immunocytochemistry/ Immunofluorescence - Anti-Bak antibody [AT38E2] (ab104124)

Immunofluorescence staining of Bak in HeLa cells using Hoechst 33342 (Blue) for nucleus staining and ab104124 antibody (1/500) with Texas Red (Red).

**This image was produced using the ascites version of this antibody.**

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

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