


## Product datasheet

### Anti-Bax antibody ab53154

★☆☆☆☆ [1 Abreviews](#) [259 References](#) [4 Images](#)

#### Overview

<b>Product name</b>	Anti-Bax antibody
<b>Description</b>	Rabbit polyclonal to Bax
<b>Host species</b>	Rabbit
<b>Specificity</b>	Preliminary customer data suggests that the current lot may not work in rat species, therefore it will be removed as a validated species until new testing is available.
<b>Tested applications</b>	<b>Suitable for:</b> ICC/IF, WB, IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human <b>Predicted to work with:</b> Rat 
<b>Immunogen</b>	Synthetic peptide corresponding to Human Bax. The immunogen is within aa 1-50. Database link: <a href="#">Q07812</a>
<b>General notes</b>	<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. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: 0.87% Sodium chloride, 50% Glycerol, PBS  Without Mg <sup>2+</sup> and Ca <sup>2+</sup>
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab53154 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
ICC/IF	★☆☆☆☆ (1)	1/100 - 1/500.
WB		1/500 - 1/1000. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

## Target

### Function

Accelerates programmed cell death by binding to, and antagonizing the apoptosis repressor BCL2 or its adenovirus homolog E1B 19k protein. Under stress conditions, undergoes a conformation change that causes translocation to the mitochondrion membrane, leading to the release of cytochrome c that then triggers apoptosis. Promotes activation of CASP3, and thereby apoptosis.

### Tissue specificity

Expressed in a wide variety of tissues. Isoform Psi is found in glial tumors. Isoform Alpha is expressed in spleen, breast, ovary, testis, colon and brain, and at low levels in skin and lung. Isoform Sigma is expressed in spleen, breast, ovary, testis, lung, colon, brain and at low levels in skin. Isoform Alpha and isoform Sigma are expressed in pro-myelocytic leukemia, histiocytic lymphoma, Burkitt's lymphoma, T-cell lymphoma, lymphoblastic leukemia, breast adenocarcinoma, ovary adenocarcinoma, prostate carcinoma, prostate adenocarcinoma, lung carcinoma, epidermoid carcinoma, small cell lung carcinoma and colon adenocarcinoma cell lines.

### Sequence similarities

Belongs to the Bcl-2 family.

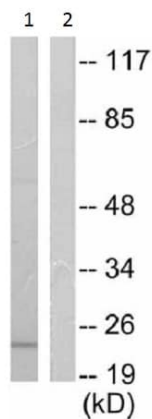
### Domain

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.

### Cellular localization

Cytoplasm and Mitochondrion membrane. Cytoplasm. Colocalizes with 14-3-3 proteins in the cytoplasm. Under stress conditions, undergoes a conformation change that causes release from JNK-phosphorylated 14-3-3 proteins and translocation to the mitochondrion membrane.

## Images



Western blot - Anti-Bax antibody (ab53154)

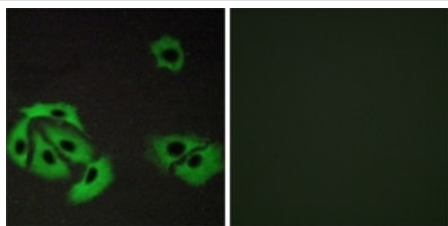
**All lanes :** Anti-Bax antibody (ab53154) at 1/500 dilution

**Lane 1 :** Untreated HeLa (Human epithelial cell line from cervix adenocarcinoma) cell extracts

**Lane 2 :** HeLa (Human epithelial cell line from cervix adenocarcinoma) cell extracts with immunizing peptide

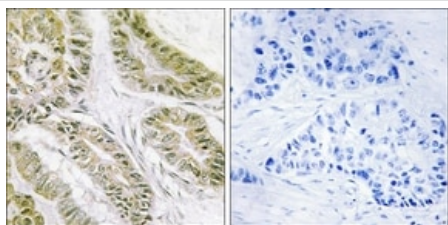
**Predicted band size:** 21 kDa

**Observed band size:** 21 kDa



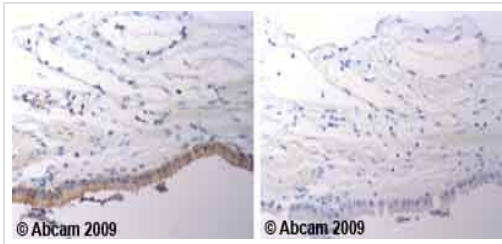
Immunocytochemistry/ Immunofluorescence - Anti-Bax antibody (ab53154)

Immunofluorescence analysis of A549 (Human lung carcinoma cell line) cells, using ab53154 at 1/100 dilution. The picture on the right is treated with the synthesized peptide.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bax antibody (ab53154)

Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using ab53154 at 1/50 dilution. The picture on the right is treated with the synthesized peptide.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bax antibody (ab53154)

ab53154 staining human normal gallbladder tissue. Staining is localized to cell membrane and cytoplasm.

Left panel: ab53154 at 4 µg/ml. Right panel: Isotype control.

Sections were stained using an automated system at room temperature. Sections were rehydrated and antigen retrieved with the EDTA pH 9.0. Slides were blocked in 3% H<sub>2</sub>O<sub>2</sub>, methanol for 10 minutes. They were then blocked for 10 minutes (containing casein 0.25% in PBS) then incubated with primary antibody for 20 minutes and detected for 30 minutes. Colorimetric detection was completed with diaminobenzidine for 5 minutes. Slides were counterstained with hematoxylin and coverslipped. Please note that for manual staining we recommend to optimize the primary antibody concentration and incubation time (overnight incubation), and amplification may be required.

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

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