

Product datasheet

Anti-Bax antibody [E63] ab32503

KO VALIDATED Recombinant RabMAB

★★★★★ 13 Abreviews 81 References 7 Images

Overview

Product name	Anti-Bax antibody [E63]
Description	Rabbit monoclonal [E63] to Bax
Tested applications	Suitable for: IHC-P, WB, IP, Sandwich ELISA Unsuitable for: Flow Cyt or ICC
Species reactivity	Reacts with: Mouse, Rat, Human, Chinese hamster Predicted to work with: Cow ▲
Immunogen	Synthetic peptide within Human Bax aa 1-100 (N terminal). The exact sequence is proprietary. Run BLAST with ExPASy Run BLAST with NCBI
Positive control	WB: HeLa cell lysate. IHC-P: Human lymph node and rat kidney tissues.
General notes	This product is a recombinant rabbit monoclonal antibody. Produced using Abcam's RabMAB® technology. RabMAB® technology is covered by the following U.S. Patents, No. 5,675,063 and/or 7,429,487. A trial size is available to purchase for this antibody.

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	PBS 49%,Sodium azide 0.01%,Glycerol 50%,BSA 0.05%
Purity	Immunogen affinity purified
Clonality	Monoclonal
Clone number	E63
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab32503** 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
IHC-P		1/250. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB	★★★★★	1/1000 - 1/10000. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa).
IP		1/100.
Sandwich ELISA		Use at an assay dependent concentration. Can be paired for Sandwich ELISA with Mouse monoclonal [2D2] to Bax (ab77566) .

Application notes Is unsuitable for Flow Cyt or ICC.

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.

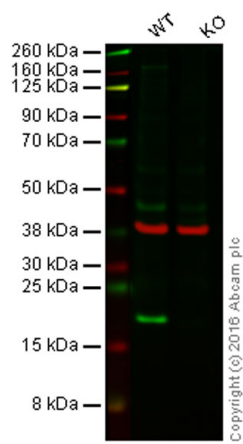
Domain

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.

Anti-Bax antibody [E63] images



Western blot - Anti-Bax antibody [E63] (ab32503)

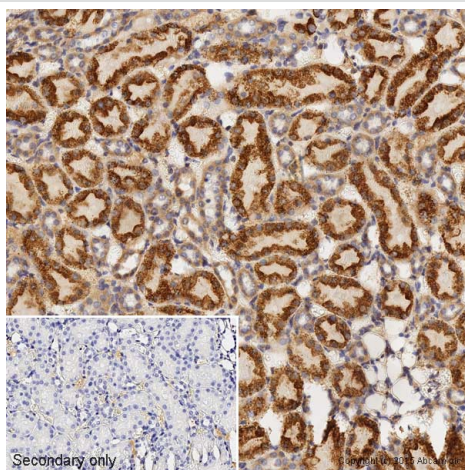
Predicted band size : 21 kDa

Lane 1: Wild-type HAP1 cell lysate (20 μ g)

Lane 2: Bax knockout HAP1 cell lysate (20 μ g)

Lanes 1 - 2: Merged signal (red and green).

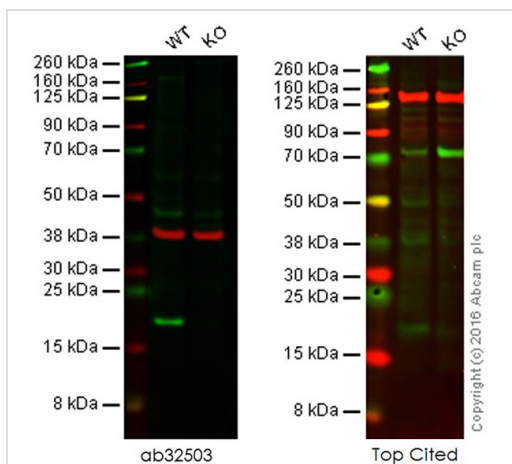
Green - ab32503 observed at 20 kDa. Red - loading control, ab8245, observed at 37 kDa. ab32503 was shown to recognize Bax when Bax knockout samples were used, along with additional cross-reactive bands. Wild-type and Bax knockout samples were subjected to SDS-PAGE. ab32503 and ab8245 (loading control to GAPDH) were diluted at 1/1000 and 1/10 000 respectively and incubated overnight at 4°C. 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 1/10 000 dilution for 1 h at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bax antibody [E63] (ab32503)

IHC image of ab32503 staining Bax in rat kidney formalin fixed paraffin embedded tissue sections, performed on a Leica Bond. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab32503, 1:250 dilution, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. No primary antibody was used in the secondary only control (shown on the inset).

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



Western blot - Anti-Bax antibody [E63] (ab32503)

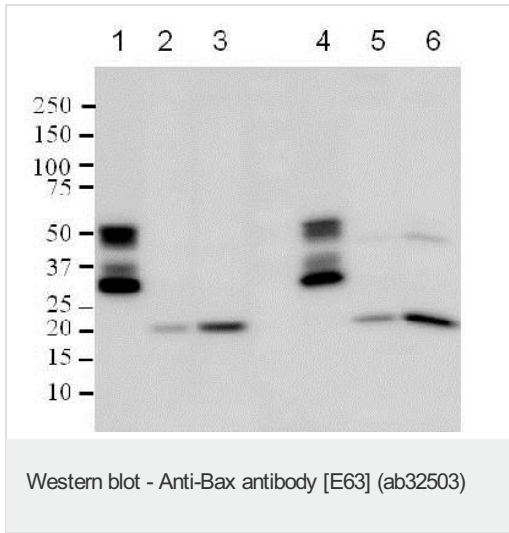
Predicted band size : 21 kDa

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

Lane 2: Bax knockout HAP1 cell lysate (20 µg)

Lanes 1 - 2: Merged signal (red and green). Green - ab32503 observed at 20 kDa. Red - loading control, ab8245, observed at 37 kDa or ab18058, observed at 130 kDa.

This western blot image is a comparison between ab32503 and a competitor's top cited rabbit polyclonal antibody.



Predicted band size : 21 kDa

Lane 1 = Bax protein (Tagged) (ab85157), 10 ng. Lane 2 = Extract of HeLa cells, 40 ug.

Lane 3 = Extract of HepG2 cells, 40 ug. Lane

4 = Bax protein (Tagged) (ab85157), 10 ng.

Lane 5 = Extract of HeLa cells, 40 ug. Lane 6

= Extract of HepG2 cells, 40 ug. SDS PAGE

performed under reducing conditions (100mM

DTT Sample heated at 50°C). Primary : Lanes

1-3: Anti Bax antibody (ab77566) at 1 ug/mL.

Lanes 4-6: Anti Bax antibody (ab32503) at

1:2000 dilution. Secondary : Lanes 1-3: Goat

anti mouse IgG(H&L)-HRP at 1:10000. Lanes

4-6: Goat anti rabbit IgG(H&L)-HRP at

1:10000. Development: ECL with 2 min

exposure. Blocking: in 5% Milk + PBS for 3

hours at RT. Primary antibody: in 5% Milk +

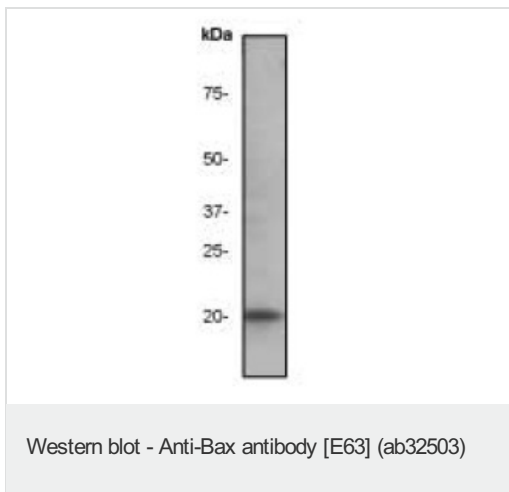
PBS overnight at 4 C. Secondary antibody: in

5% Milk + PBS for 2 hour at RT. Predicted

band size : Bax 21kDa and Bax (Tagged) 49

kDa. Observed band size : Bax 21kDa and

Bax (Tagged) 49 kDa.



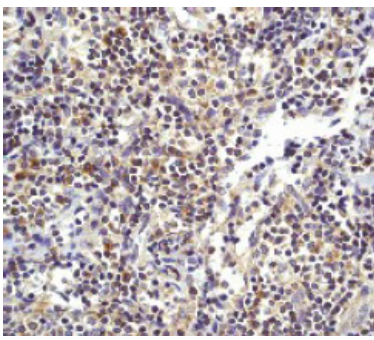
Anti-Bax antibody [E63] (ab32503) at 1/2000 dilution + HeLa cell lysate

Secondary

Goat anti-rabbit HRP antibody

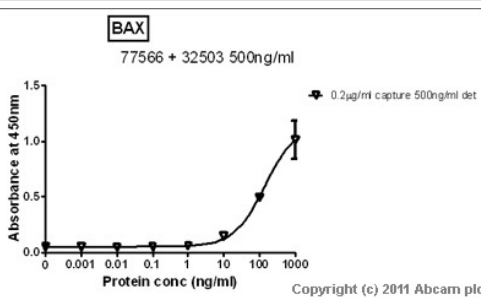
Developed using the ECL technique

Predicted band size : 21 kDa



Immunohistochemical analysis of paraffin-embedded human lymph node using anti-Bax Rabbit Monoclonal Antibody (ab32503) at 1/250 dilution.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Bax antibody [E63] (ab32503)



Standard Curve for Bax (Analyte: [ab85157](#)) dilution range 1pg/ml to 1ug/ml using Capture Antibody [Mouse monoclonal \[2D2\] to Bax - BSA and Azide free \(ab77566\)](#) at 0.2ug/ml and Detector Antibody [Rabbit monoclonal \[E63\] to Bax \(ab32503\)](#) at 0.5ug/ml
Concentration of [ab32503](#) may vary from lot to lot; please use this curve as guideline.

Sandwich ELISA - Anti-Bax antibody [E63] (ab32503)

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