

Product datasheet

Anti-Bax antibody [EPR18283] ab182733

KO **VALIDATED** Recombinant RabMAb

★★★★☆ [6 Abreviews](#) [214 References](#) [7 Images](#)

Overview

Product name	Anti-Bax antibody [EPR18283]
Description	Rabbit monoclonal [EPR18283] to Bax
Host species	Rabbit
Specificity	Expression levels of BAX protein vary with sample type. Induction may be required if endogenous expression is low.
Tested applications	Suitable for: IP, WB
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Human fetal liver, fetal heart, fetal kidney, fetal spleen and fetal lung lysates; Human thymus, cerebellum and lymph node lysates; HeLa, MCF7, HuT-78, Ramos, HEK-293, Raji, L-929, C2C12, C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates; Mouse brain, heart, kidney and spleen lysates; Rat brain, kidney and spleen lysates. IP: HeLa whole cell lysate.
General notes	<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>

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	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol, 0.05% BSA</p>
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR18283
Isotype	IgG

Applications

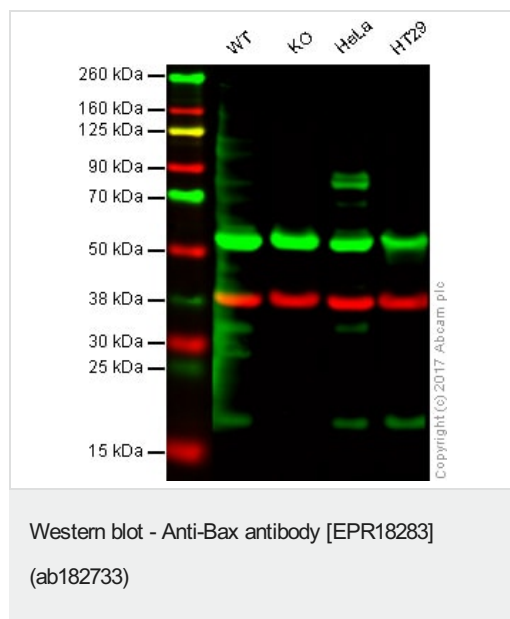
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab182733 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		1/50.
WB	★★★★★ (5)	1/2000. Detects a band of approximately 21 kDa (predicted molecular weight: 21 kDa).

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



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

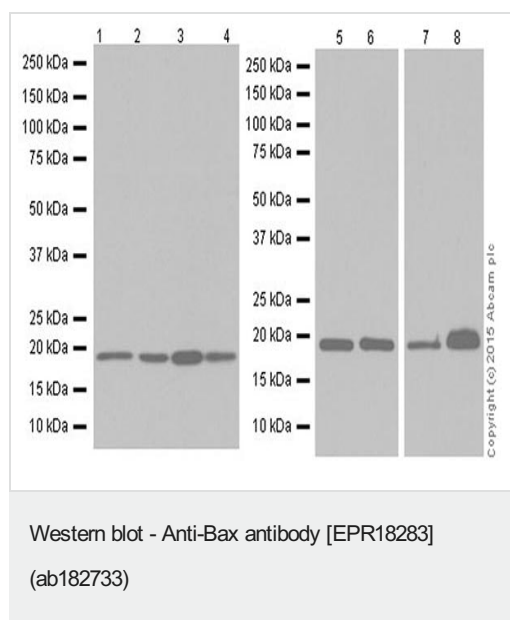
Lane 2: BAX knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: HT29 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab182733 observed at 20 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab182733 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. Ab182733 and **ab8245** (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 2000 dilution and 1/10000 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 **ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



All lanes : Anti-Bax antibody [EPR18283] (ab182733) at 1/2000 dilution

Lane 1 : Human fetal liver lysate

Lane 2 : Human fetal heart lysate

Lane 3 : Human fetal kidney lysate

Lane 4 : Human fetal spleen lysate

Lane 5 : Human fetal lung lysate

Lane 6 : Human thymus lysate

Lane 7 : Human cerebellum lysate

Lane 8 : Human lymph node lysate

Lysates/proteins at 10 µg per lane.

Secondary

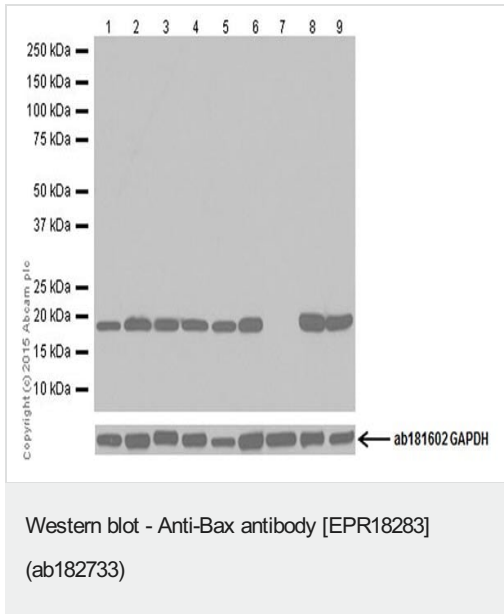
All lanes : Goat Anti-Rabbit IgG Peroxidase Conjugate, specific to the non-reduced form of IgG at 1/10000 dilution

Predicted band size: 21 kDa

Observed band size: 21 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1,2,3 and 4: 8 seconds; Lane 5 and 6: 1 minute; Lane 7 and 8: 15 seconds.



All lanes : Anti-Bax antibody [EPR18283] (ab182733) at 1/5000 dilution

Lane 1 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lane 2 : MCF7 (Human breast adenocarcinoma cell line) whole cell lysate

Lane 3 : HuT-78 (Human Sezary syndrome cell line) whole cell lysate

Lane 4 : Ramos (Human Burkitt's lymphoma cell line) whole cell lysate

Lane 5 : HEK-293 (Human epithelial cell line from embryonic kidney) whole cell lysate

Lane 6 : Raji (Human Burkitt's lymphoma cell line) whole cell lysate

Lane 7 : Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

Lane 8 : L-929 (Mouse connective tissue fibroblast cell line) whole cell lysate

Lane 9 : C2C12 (Mouse myoblast 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

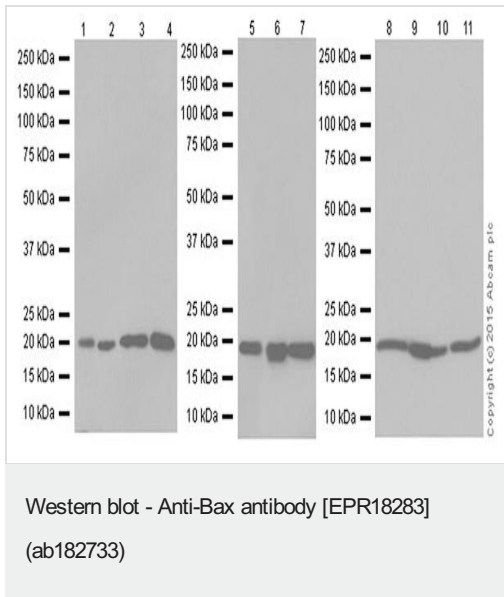
Predicted band size: 21 kDa

Observed band size: 21 kDa

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

Jurkat doesn't express Bax. (PMID: 9583678).



All lanes : Anti-Bax antibody [EPR18283] (ab182733) at 1/2000 dilution

Lane 1 : Mouse brain lysate

Lane 2 : Mouse heart lysate

Lane 3 : Mouse kidney lysate

Lane 4 : Mouse spleen lysate

Lane 5 : Rat brain lysate

Lane 6 : Rat kidney lysate

Lane 7 : Rat spleen lysate

Lane 8 : C6 (Rat glial tumor cell line) whole cell lysate

Lane 9 : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

Lane 10 : PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate

Lane 11 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

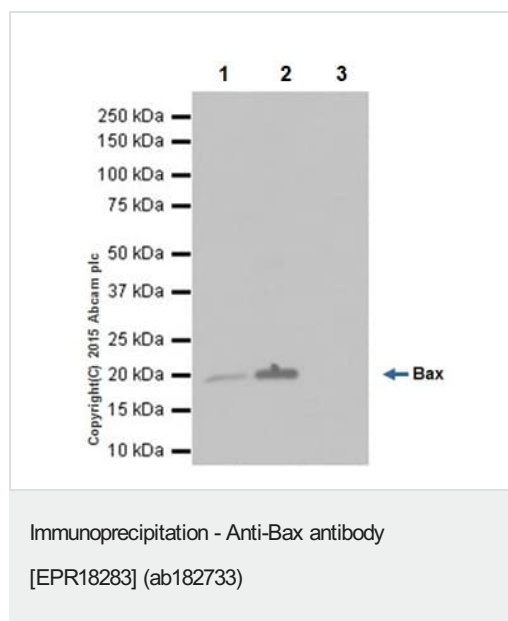
All lanes : Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

Predicted band size: 21 kDa

Observed band size: 21 kDa

Blocking/Dilution buffer: 5% NFDm/TBST.

Exposure time: Lane 1-7: 30 seconds; Lane 8-11: 1 second.



Bax was immunoprecipitated from 1mg of HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate with ab182733 at 1/50 dilution. Western blot was performed from the immunoprecipitate using ab182733 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)), was used for detection at 1/10000 dilution.

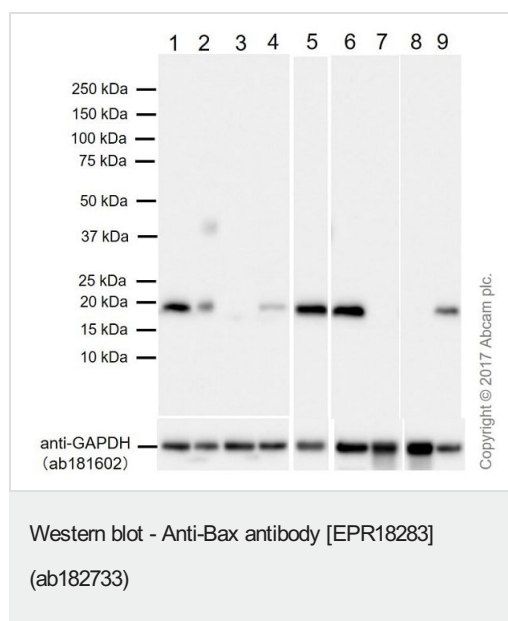
Lane 1: HeLa whole cell lysate, 10µg (Input).

Lane 2: ab182733 IP in HeLa whole cell lysate.

Lane 3: Rabbit IgG, monoclonal - Isotype Control ([ab172730](#)) instead of ab182733 in HeLa whole cell lysate.

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

Exposure time: 1 second.



All lanes : Anti-Bax antibody [EPR18283] (ab182733) at 1/2000 dilution

Lane 1 : HeLa (Human cervix adenocarcinoma epithelial cell).

Whole cell lysates

Lane 2 : Hep G2 (Human hepatocellular carcinoma epithelial cell).

Whole cell lysates

Lane 3 : Jurkat (Human T cell leukemia T lymphocyte) Whole cell lysates

Lane 4 : A549 (Human lung carcinoma epithelial cell) Whole cell lysates

Lane 5 : C2C12 (Mouse myoblasts myoblast) Whole cell lysates

Lane 6 : C6 (Rat glial tumor glial cell) Whole cell lysates

Lane 7 : Mouse brain. Whole tissue lysate

Lane 8 : Rat brain. Whole tissue lysate

Lane 9 : Rat Spleen. Whole tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution (Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated)

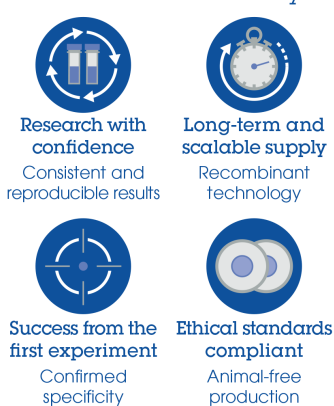
Predicted band size: 21 kDa

Observed band size: 18 kDa

Blocking and Diluting buffers: 5% NFDM/TBST

Exposure time 58 s

Why choose a recombinant antibody?



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

Anti-Bax antibody [EPR18283] (ab182733)

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