

Bax Antibody (BH3 Domain Specific)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP1302a

Specification

Bax Antibody (BH3 Domain Specific) - Product Information

Application	WB, FC,E
Primary Accession	Q07812
Other Accession	Q02703 , Q07814
Reactivity	Human, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	41-76

Bax Antibody (BH3 Domain Specific) - Additional Information

Gene ID 581

Other Names

Apoptosis regulator BAX, Bcl-2-like protein 4, Bcl2-L-4, BAX, BCL2L4

Target/Specificity

This Bax antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 41-76 amino acids from human Bax.

Dilution

WB~~1:2000

FC~~1:25

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Bax Antibody (BH3 Domain Specific) is for research use only and not for use in diagnostic or therapeutic procedures.

Bax Antibody (BH3 Domain Specific) - Protein Information

Name BAX

Synonyms BCL2L4

Function Plays a role in the mitochondrial apoptotic process (PubMed:[10772918](#), PubMed:[11060313](#), PubMed:[16113678](#), PubMed:[16199525](#), PubMed:[18948948](#), PubMed:[21199865](#), PubMed:[21458670](#), PubMed:[25609812](#), PubMed:[36361894](#), PubMed:[8358790](#), PubMed:[8521816](#)). Under normal conditions, BAX is largely cytosolic via constant retrotranslocation from mitochondria to the cytosol mediated by BCL2L1/Bcl-xL, which avoids accumulation of toxic BAX levels at the mitochondrial outer membrane (MOM) (PubMed:[21458670](#)). 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 (PubMed:[10772918](#), PubMed:[11060313](#), PubMed:[16113678](#), PubMed:[16199525](#), PubMed:[18948948](#), PubMed:[21199865](#), PubMed:[21458670](#), PubMed:[25609812](#), PubMed:[8358790](#), PubMed:[8521816](#)). Promotes activation of CASP3, and thereby apoptosis (PubMed:[10772918](#), PubMed:[11060313](#), PubMed:[16113678](#), PubMed:[16199525](#), PubMed:[18948948](#), PubMed:[21199865](#), PubMed:[21458670](#), PubMed:[25609812](#), PubMed:[8358790](#), PubMed:[8521816](#)).

Cellular Location

[Isoform Alpha]: Mitochondrion outer membrane; Single-pass membrane protein. Cytoplasm. Nucleus Note=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. Upon Sendai virus infection, recruited to the mitochondrion through interaction with IRF3 (PubMed:[25609812](#)) [Isoform Gamma]: Cytoplasm.

Tissue Location

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

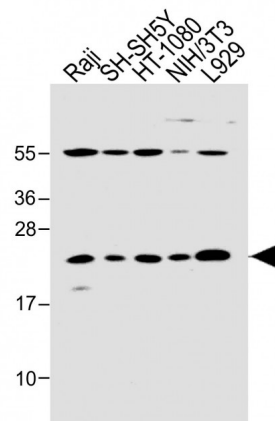
Bax Antibody (BH3 Domain Specific) - Protocols

Provided below are standard protocols that you may find useful for product applications.

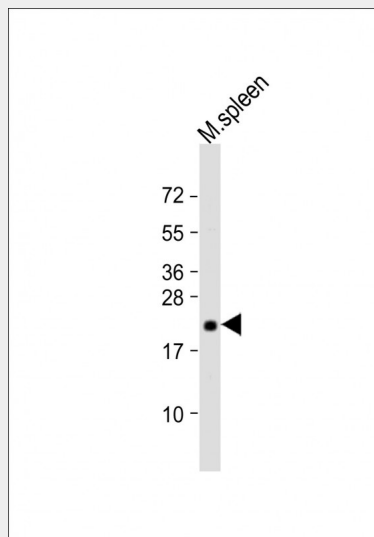
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Bax Antibody (BH3 Domain Specific) - Images

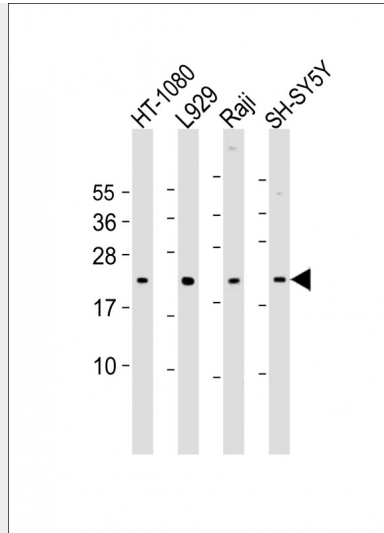




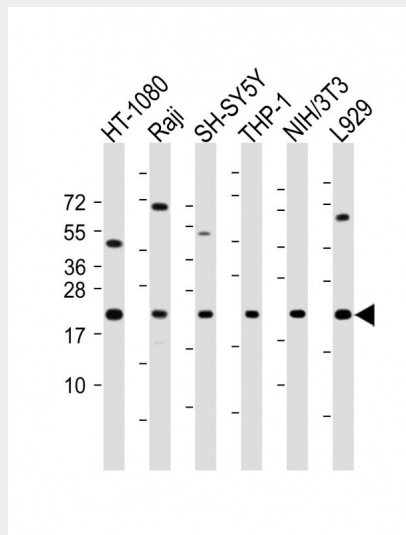
All lanes : Anti-Bax Antibody (BH3 Domain Specific) at 1:2000 dilution Lane 1: Raji whole cell lysate Lane 2: SH-SH5Y whole cell lysate Lane 3: HT-1080 whole cell lysate Lane 4: NIH/3T3 whole cell lysate Lane 5: L929 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



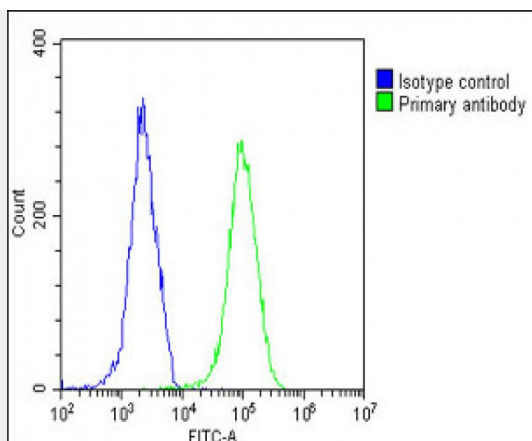
Anti-Bax Antibody (BH3) at 1:2000 dilution + mouse spleen lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDm/TBST.



All lanes : Anti-Bax Antibody (BH3) at 1:2000 dilution Lane 1: HT-1080 whole cell lysate Lane 2: L929 whole cell lysate Lane 3: Raji whole cell lysate Lane 4: SH-SY5Y whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



All lanes : Anti-Bax Antibody (BH3 Domain Specific) at 1:2000 dilution Lane 1: HT-1080 whole cell lysate Lane 2: Raji whole cell lysate Lane 3: SH-SY5Y whole cell lysate Lane 4: THP-1 whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lane 6: L929 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 21 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



Overlay histogram showing HeLa cells stained with AP1302a (green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then incubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AP1302a, 1:25 dilution) for 60 min at 37°C. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed (OE188374) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was rabbit IgG1 (1 µg/1x10⁶ cells) used under the same conditions. Acquisition of >10,000 events was performed.

Bax Antibody (BH3 Domain Specific) - Background

Bax belongs to the BCL2 protein family. BCL2 family members form hetero- or homodimers and act as anti- or pro-apoptotic regulators that are involved in a wide variety of cellular activities. Bax forms a heterodimer with BCL2, and functions as an apoptotic activator. This protein is reported to interact with, and increase the opening of, the mitochondrial voltage-dependent anion channel (VDAC), which leads to the loss in membrane potential and the release of cytochrome c. The expression of the Bax gene is regulated by the tumor suppressor P53 and has been shown to be involved in P53-mediated apoptosis.

Bax Antibody (BH3 Domain Specific) - References

Liu, F.T., et al., *Biochem. Biophys. Res. Commun.* 310(3):956-962 (2003). Roucou, X., et al., *J. Biol. Chem.* 278(42):40877-40881 (2003). Cao, X., et al., *Blood* 102(7):2605-2614 (2003). McJilton, M.A., et al., *Oncogene* 22(39):7958-7968 (2003). Bidere, N., et al., *J. Biol. Chem.* 278(33):31401-31411 (2003).

Bax Antibody (BH3 Domain Specific) - Citations

- [The conformational stability of pro-apoptotic BAX is dictated by discrete residues of the protein core](#)
- [Klotho overexpression suppresses apoptosis by regulating the Hsp70/Akt/Bad pathway in H9c2\(2-1\) cells](#)
- [A Marine Terpenoid, Heteronemin, Induces Both the Apoptosis and Ferroptosis of Hepatocellular Carcinoma Cells and Involves the ROS and MAPK Pathways](#)
- [Isochamaejasmin induces toxic effects on Helicoverpa zea via DNA damage and mitochondria-associated apoptosis](#)
- [Small-molecule allosteric inhibitors of BAX](#)
- [Probing BAK and BAX Activation and Pore Assembly with Cytochrome c Release, Limited Proteolysis, and Oxidant-Induced Linkage](#)
- [Oridonin enhances the radiosensitivity of lung cancer cells by upregulating Bax and downregulating Bcl-2](#)
- [Mitochondrial Dysfunctions Regulated Radioresistance through Mitochondria-to-Nucleus Retrograde Signaling Pathway of NF-κB/PI3K/AKT2/mTOR](#)
- [Effects of secreted frizzled-related protein 1 on proliferation, migration, invasion, and](#)

[apoptosis of colorectal cancer cells.](#)

- [Photodynamic Therapy Using Indolines-Fused-Triazoles Induces Mitochondrial Apoptosis in Human Non-Melanoma BCC Cells.](#)
- [Edaravone ameliorates compression-induced damage in rat nucleus pulposus cells.](#)
- [Hypoxic preconditioning attenuates apoptosis via inactivation of adenosine A2a receptor through NDRG3-Raf-ERK pathway.](#)
- [Early septic insult in neonatal pigs increases serum and urinary soluble Fas ligand and decreases kidney function without inducing significant renal apoptosis.](#)
- [HMGB1 knockdown effectively inhibits the progression of rectal cancer by suppressing HMGB1 expression and promoting apoptosis of rectal cancer cells.](#)
- [Oridonin phosphate-induced autophagy effectively enhances cell apoptosis of human breast cancer cells.](#)
- [BH3-triggered structural reorganization drives the activation of proapoptotic BAX.](#)
- [Ceramide 1-phosphate inhibits serine palmitoyltransferase and blocks apoptosis in alveolar macrophages.](#)