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Bax Antibody
Catalog # ASC10254

Specification

Bax Antibody - Product Information

Application	**WB, ICC, IF**
Primary Accession	Q07812
Other Accession	AAA03619, 388166
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Application Notes	**Bax antibody can be used for detection of Bax by Western blot at 1 to 4 µg/mL. Antibody can also be used for immunocytochemistry starting at 2 µg/mL. For immunofluorescence start at 2 µg/mL.**

Bax Antibody - Additional Information

Gene ID **581**

Other Names
Bax Antibody: BCL2L4, BCL2L4, Apoptosis regulator BAX, Bcl-2-like protein 4, Bcl2-L-4, BCL2-associated X protein

Target/Specificity
BAX;

Reconstitution & Storage
Bax antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
Bax Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Bax Antibody - Protein Information

Name BAX

Synonyms BCL2L4

Function
Plays a role in the mitochondrial apoptotic process (PubMed:10772918, PubMed:11060313, PubMed:16113678, PubMed:16199525, PubMed:<a

href="http://www.uniprot.org/citations/18948948" target="_blank">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 - Protocols

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

- Western Blot

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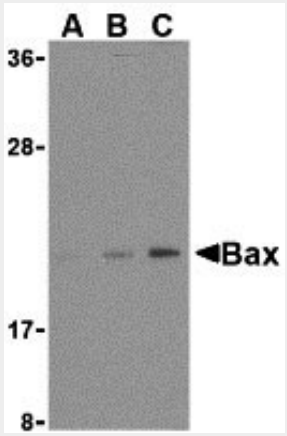
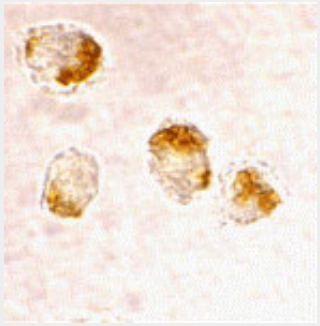
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

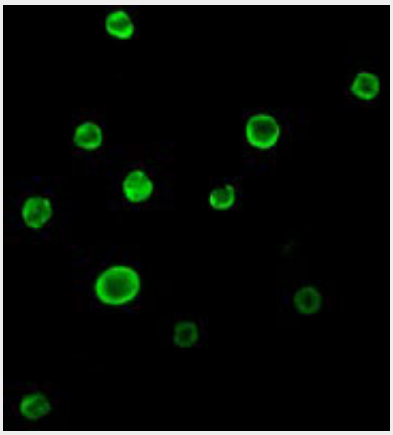
Bax Antibody - Images



Western blot analysis of Bax in HL-60 cell lysates with Bax antibody at (A) 1, (B) 2, and (C) 4 µg/mL.



Immunocytochemistry staining of HL-60 cells using Bax at 2 µg/mL.



Immunofluorescence of Bax in HL60 cells with Bax antibody at 2 µg/mL.

Bax Antibody - Background

Bax Antibody: Apoptosis plays a major role in normal organism development, tissue homeostasis, and removal of damaged cells. Disruption of this process has been implicated in a variety of diseases such as cancer. The Bcl-2 family of proteins is comprised of critical regulators of apoptosis that can be divided into two classes: those that inhibit apoptosis and those that promote cell death. Bax, a pro-apoptotic Bcl-2 family member, is a cytosolic protein that changes conformation and translocates to the mitochondria following apoptotic stimuli. It is thought to share significant functional homology with Bak, another pro-apoptotic Bcl-2 family member, as disruption of bax or bak has little effect on cell death, but mice lacking both genes display multiple developmental defects and cells lacking both show decreased apoptotic capability.

Bax Antibody - References

Lockshin RA, Osborne B, and Zakeri Z. Cell death in the third millennium. Cell Death Differ. 2000; 7:2-7.
Cory S, Huang DCS, and Adams JM. The Bcl-2 family: roles in cell survival and oncogenesis. Oncogene 2003; 22:8590-607.
Heiser D, Labi V, Erlacher M, et al. The Bcl-2 protein family and its role in the development of neoplastic disease. Exp. Geron. 2004; 39:1125-35.
Oltvai ZN, Milliman CL, and Korsmeyer SJ. Bcl-2 heterodimerizes in vivo with a conserved homolog, Bax, that accelerates programmed cell death. Cell 1993; 74:609-19.