

BAX Antibody

Mouse Monoclonal Antibody (Mab)
Catalog # AM2087b

Specification

BAX Antibody - Product Information

Application WB,E **Primary Accession** 007812 NP 004315.1 Other Accession Reactivity Human Host Mouse Clonality **Monoclonal** Isotype lgG2b Calculated MW 21184 Antigen Region 28-56

BAX Antibody - 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 mice immunized with a KLH conjugated synthetic peptide between 28-56 amino acids from human BAX .

Dilution

WB~~1:100

E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

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

BAX Antibody - Protein Information

Name BAX

Synonyms BCL2L4



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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

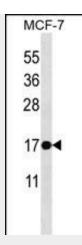
BAX Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BAX Antibody - Images





BAX Antibody(Cat. #AM2087b) western blot analysis in MCF-7 cell line lysates (35µg/lane). This demonstrates the BAX antibody detected the BAX protein (arrow).

BAX Antibody - Background

The protein encoded by this gene 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. This protein 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 this gene is regulated by the tumor suppressor P53 and has been shown to be involved in P53-mediated apoptosis. Multiple alternatively spliced transcript variants, which encode different isoforms, have been reported for this gene.

BAX Antibody - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Montessuit, S., et al. Cell 142(6):889-901(2010) Ding, J., et al. J. Biol. Chem. 285(37):28749-28763(2010) Ho-Pun-Cheung, A., et al. Pharmacogenomics J. (2010) In press: Yu, D.K., et al. Zhonghua Zhong Liu Za Zhi 32(5):324-327(2010)