

## **Bax Antibody (Center)**

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18517a

## **Specification**

## **Bax Antibody (Center) - Product Information**

Application WB,E
Primary Accession Q07812

Other Accession <u>Q63690, Q07813, NP 004315.1</u>

Reactivity
Predicted
Host
Clonality
Isotype
Calculated MW
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit IgG
21184
69-98

# **Bax Antibody (Center) - 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 69-98 amino acids from the Central region of human Bax.

## **Dilution**

WB~~1:1000

## **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 (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

## **Bax Antibody (Center) - 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

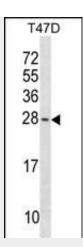
# **Bax Antibody (Center) - Protocols**

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 (Center) - Images





Bax Antibody (Cat. #AP18517a) western blot analysis in T47D cell line lysates (35ug/lane). This demonstrates the Bax antibody detected the Bax protein (arrow).

## Bax Antibody (Center) - 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 (Center) - 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)

# **Bax Antibody (Center) - Citations**

• GABA A receptor π subunit promotes apoptosis of HTR-8/SVneo trophoblastic cells: Implications in preeclampsia.