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# **Bax Antibody**

Rabbit mAb Catalog # AP90125

## **Product Information**

**Application** WB, IHC, FC, IP

Primary Accession Q07812

**Reactivity** Rat, Human, Mouse, Hamster

**Clonality** Monoclonal

Other Names Apoptosis regulator BAX; BAX; Bcl-2-like protein 4; BCL2-associated X protein;

Bcl2-L-4; BCL2L4

IsotypeRabbit IgGHostRabbitCalculated MW21184

### **Additional Information**

**Dilution** WB 1:1000~1:2000 IHC 1:50~1:200 IP 1:50 FC 1:50

**Purification** Affinity-chromatography

**Immunogen** A synthesized peptide derived from human Bax

**Description**Bax is a key component for cellular induced apoptosis through mitochondrial

stress. Upon apoptotic stimulation, Bax forms oligomers and translocates from the cytosol to the mitochondrial membrane. Through interactions with

pore proteins on the mitochondrial membrane, Bax increases the

membrane's permeability, which leads to the release of cytochrome c from mitochondria, activation of caspase-9 and initiation of the caspase activation

pathway for apoptosis.

Storage Condition and Buffer Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium

azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term.

Avoid freeze / thaw cycle.

### **Protein Information**

Name BAX

Synonyms BCL2L4

**Function** Plays a role in the mitochondrial apoptotic process (PubMed: 10772918,

PubMed:<u>11060313</u>, PubMed:<u>16113678</u>, PubMed:<u>16199525</u>, PubMed:<u>18948948</u>, PubMed:<u>21199865</u>, PubMed:<u>21458670</u>,

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:<u>10772918</u>, PubMed:<u>11060313</u>, PubMed:<u>16113678</u>, PubMed:<u>16199525</u>, PubMed:<u>18948948</u>,

PubMed:21199865, PubMed:21458670, PubMed:25609812, PubMed:8358790,

PubMed:<u>8521816</u>). Promotes activation of CASP3, and thereby apoptosis

(PubMed:<u>10772918</u>, PubMed:<u>11060313</u>, PubMed:<u>16113678</u>, PubMed:<u>16199525</u>, PubMed:<u>18948948</u>, PubMed:<u>21199865</u>,

PubMed:<u>21458670</u>, PubMed:<u>25609812</u>, PubMed:<u>8358790</u>, PubMed:<u>8521816</u>).

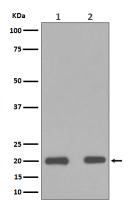
#### **Cellular Location**

[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

## **Images**



Western blot analysis of Bax in (1) HeLa cell lysate;(2) RAW264.7 Whole Cell Lysate.

Image not found: 202311/AP90125-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human adenocarcinoma of colon, using Bax Antibody.

Image not found: 202311/AP90125-wb4.jpg

Taurine protects INS-1 cells from apoptosis induced by Di(2-ethylhexyl) phthalate via reducing oxidative stress and autophagy. -Toxicology Mechanisms and Methods

Image not found: 202311/AP90125-wb5.jpg

Mechanistic insights into geniposide regulation of bile salt export pump (BSEP) expression. -RSC Advances

Image not found: 202311/AP90125-wb6.jpg

Chloride intracellular channel 1 regulates the antineoplastic effects of metformin in gallbladder cancer cells. -cancer science

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.