

# Bax (Apoptosis Marker) Antibody - With BSA and Azide

Mouse Monoclonal Antibody [Clone BAX/962] Catalog # AH12218

## **Product Information**

Application WB, IHC, IF, FC
Primary Accession Q07812
Other Accession 581, 624291
Reactivity Human, Monkey

Host Mouse
Clonality Monoclonal
Isotype Mouse / IgG1
Clone Names BAX/962
Calculated MW 21184

## **Additional Information**

Gene ID 581

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

**Application Note** WB~~1:1000 IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50

**Storage** Store at 2 to 8°C.Antibody is stable for 24 months.

**Precautions** Bax (Apoptosis Marker) Antibody - With BSA and Azide is for research use

only and not for use in diagnostic or therapeutic procedures.

### **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:<u>25609812</u>, PubMed:<u>36361894</u>, PubMed:<u>8358790</u>, PubMed:<u>8521816</u>).

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:<u>21199865</u>, PubMed:<u>21458670</u>, PubMed:<u>25609812</u>, PubMed:<u>8358790</u>,

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

(PubMed:10772918, PubMed:11060313, PubMed:16113678, PubMed:16199525, PubMed:18948948, PubMed:21199865,

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

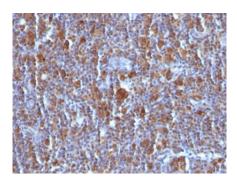
# **Background**

Recognizes a protein of 21kDa, identified as the Bax protein. This MAb is highly specific to Bax and shows no cross-reaction with Bcl-2 or Bcl-X protein. Bcl-2 blocks cell death following a variety of stimuli. Bax has extensive amino acid homology with Bcl-2 and it homodimerizes and forms heterodimers with Bcl-2. Overexpression of Bax accelerates apoptotic death induced by cytokine deprivation in an IL-3 dependent cell line, and Bax also counters the death repressor activity of Bcl-2.

## References

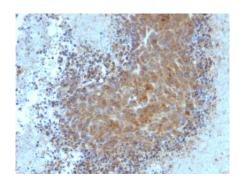
Wolter KG, et. al. Journal of Cell Biology, 1997, 139(5):1281-92

# **Images**



Formalin-fixed, paraffin-embedded Hodgkin's Lymphoma stained with Bax Monoclonal Antibody (BAX/962).

Formalin-fixed, paraffin-embedded human Melanoma stained with Bax Monoclonal Antibody (BAX/962).



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