

Anti-Bax Picoband Antibody
Catalog # ABO10036

Specification

Anti-Bax Picoband Antibody - Product Information

Application	WB, IHC
Primary Accession	Q07812
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Apoptosis regulator BAX(BAX) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Bax Picoband Antibody - Additional Information

Gene ID 581

Other Names

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

Calculated MW

21184 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Isoform Alpha: Mitochondrion membrane; Single-pass membrane protein. Cytoplasm. 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.

Tissue Specificity

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.

Protein Name

Apoptosis regulator BAX

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃N.

Immunogen

A synthetic peptide corresponding to a sequence at the N-terminus of human Bax (17-48aa EQIMKTGALLLQGFIQDRAGRMGGEAPELALD), different from the related mouse and rat sequences by five amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Anti-Bax Picoband Antibody - Protein Information

Name BAX

Synonyms BCL2L4

Function

Plays a role in the mitochondrial apoptotic process (PubMed: [10772918](http://www.uniprot.org/citations/10772918), PubMed: [11060313](http://www.uniprot.org/citations/11060313), PubMed: [16113678](http://www.uniprot.org/citations/16113678), PubMed: [16199525](http://www.uniprot.org/citations/16199525), PubMed: [18948948](http://www.uniprot.org/citations/18948948), PubMed: [21199865](http://www.uniprot.org/citations/21199865), PubMed: [21458670](http://www.uniprot.org/citations/21458670), PubMed: [25609812](http://www.uniprot.org/citations/25609812), PubMed: [36361894](http://www.uniprot.org/citations/36361894), PubMed: [8358790](http://www.uniprot.org/citations/8358790), PubMed: [8521816](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/21458670)). Under stress conditions, undergoes a conformation change that causes translocation to the mitochondrial membrane, leading to the release of cytochrome c that then triggers apoptosis (PubMed: [10772918](http://www.uniprot.org/citations/10772918), PubMed: [11060313](http://www.uniprot.org/citations/11060313), PubMed: [16113678](http://www.uniprot.org/citations/16113678), PubMed: [16199525](http://www.uniprot.org/citations/16199525), PubMed: [18948948](http://www.uniprot.org/citations/18948948), PubMed: [21199865](http://www.uniprot.org/citations/21199865), PubMed: [21458670](http://www.uniprot.org/citations/21458670), PubMed: [25609812](http://www.uniprot.org/citations/25609812), PubMed: [8358790](http://www.uniprot.org/citations/8358790)).

[8521816](http://www.uniprot.org/citations/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

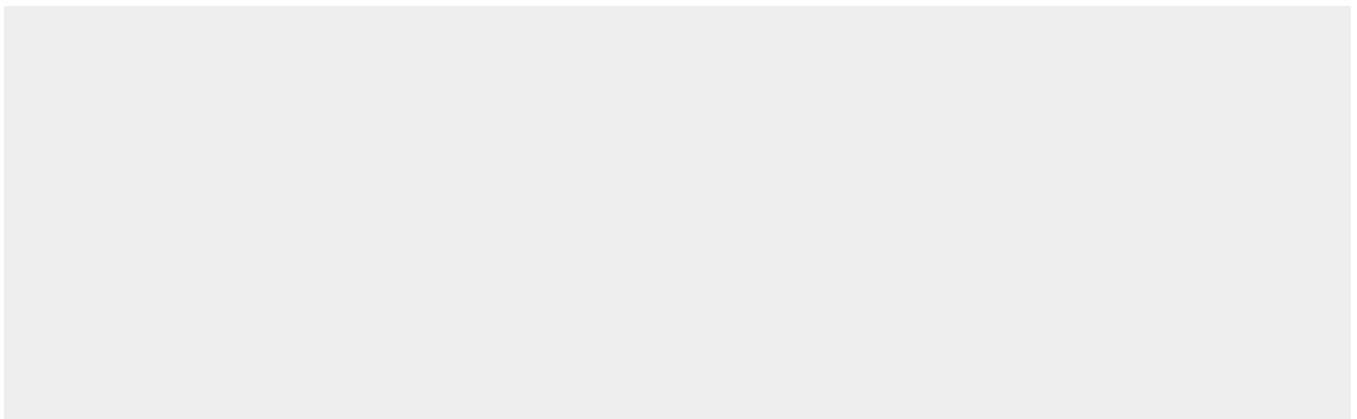
Expressed in a wide variety of tissues. Isoform Psi is found in glial tumors. Isoform Alpha is expressed in spleen, breast, ovary, testis, colon and brain, and at low levels in skin and lung Isoform Sigma is expressed in spleen, breast, ovary, testis, lung, colon, brain and at low levels in skin. Isoform 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

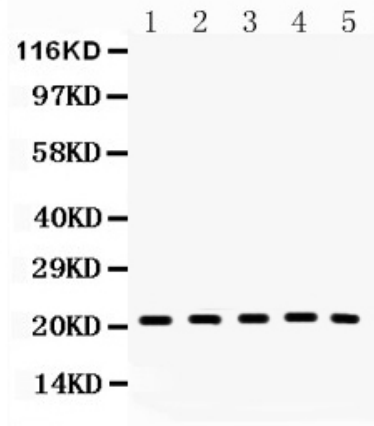
Anti-Bax Picoband Antibody - Protocols

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

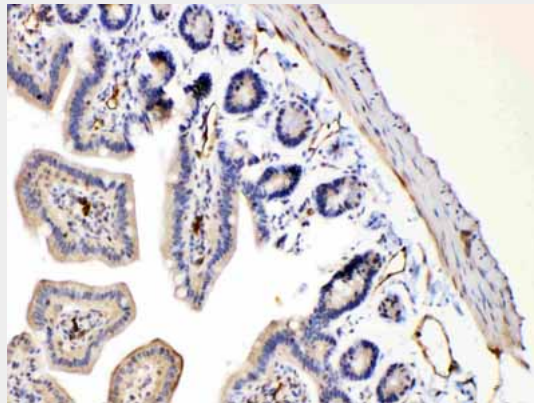
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Bax Picoband Antibody - Images

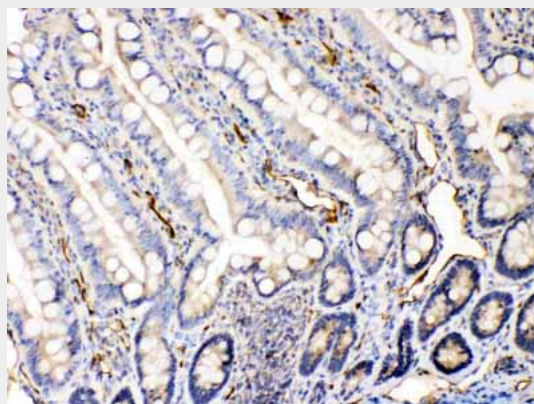




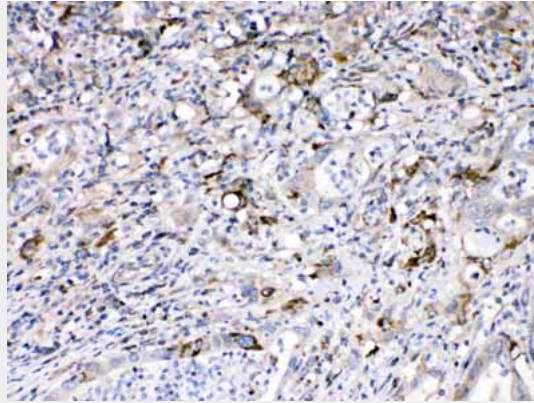
Western blot analysis of Bax expression in rat thymus extract (lane 1), mouse thymus extract (lane 2), HEPA1-6 whole cell lysates (lane 3), HELA whole cell lysates (lane 4) and MCF-7 whole cell lysates (lane 5). Bax at 21KD was detected using rabbit anti- Bax Antigen Affinity purified polyclonal antibody (Catalog #ABO10036) at 0.5 μ g/mL. The blot was developed using chemiluminescence (ECL) method .



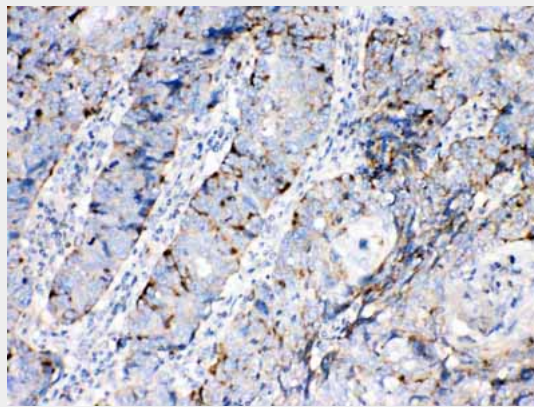
Bax was detected in paraffin-embedded sections of mouse intestine tissues using rabbit anti- Bax Antigen Affinity purified polyclonal antibody (Catalog # ABO10036) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



Bax was detected in paraffin-embedded sections of rat intestine tissues using rabbit anti- Bax Antigen Affinity purified polyclonal antibody (Catalog # ABO10036) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



Bax was detected in paraffin-embedded sections of human intestinal cancer tissues using rabbit anti-Bax Antigen Affinity purified polyclonal antibody (Catalog # ABO10036) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .



Bax was detected in paraffin-embedded sections of human lung cancer tissues using rabbit anti-Bax Antigen Affinity purified polyclonal antibody (Catalog # ABO10036) at 1 μ g/mL. The immunohistochemical section was developed using SABC method .

Anti-Bax Picoband Antibody - Background

Apoptosis regulator BAX, also known as bcl-2-like protein 4, is a protein that in humans is encoded by the BAX gene. 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. Additionally, 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.