

Bax Antibody

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AP52811

Product Information

Application	WB
Primary Accession	Q07812
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2a
Calculated MW	21184

Additional Information

Gene ID	581
Other Names	Apoptosis regulator BAX; Apoptosis regulator BAX cytoplasmic isoform beta; Apoptosis regulator BAX membrane isoform alpha; BAX; Bax isoform psi; BAX protein cytoplasmic isoform delta; Bax protein cytoplasmic isoform delta.; Bax protein cytoplasmic isoform gamma; Bax zeta; Bax-protein; BAX_HUMAN; BAXA; Bcl-2-like protein 4; BCL2 associated X protein; BCL2 associated X protein omega; BCL2 associated X protein transcript variant delta2; Bcl2-L-4; BCL2L4; membrane isoform alpha.
Dilution	WB~~1:1000
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH 7.3.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

Name	BAX
Synonyms	BCL2L4
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

Background

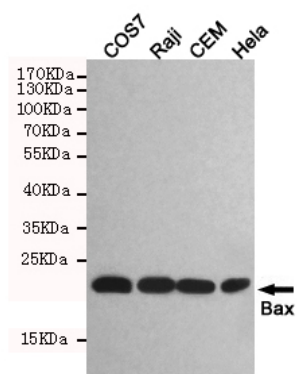
Accelerates programmed cell death by binding to, and antagonizing the apoptosis repressor BCL2 or its adenovirus homolog E1B 19k protein. Under stress conditions, undergoes a conformation change that causes translocation to the mitochondrion membrane, leading to the release of cytochrome c that then triggers apoptosis. Promotes activation of CASP3, and thereby apoptosis.

References

Oltvai Z.N.,et al.Cell 74:609-619(1993).
Apte S.S.,et al.Genomics 26:592-594(1995).
Shi B.,et al.Biochem. Biophys. Res. Commun. 254:779-785(1999).
Schmitt E.,et al.Biochem. Biophys. Res. Commun. 270:868-879(2000).
Cartron P.F.,et al.Hum. Mol. Genet. 11:675-687(2002).

Images

Western blot detection of Bax in COS7,Raji,CEM and Hela cell lysates using Bax mouse mAb (1:1000 diluted).
Predicted band size:20KDa. Observed band size:20KDa.



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