Leader in Biomolecular Solutions for Life Science

Bax Rabbit pAb

Catalog No.: A12009 51 Publications



Basic Information

Observed MW

21kDa

Calculated MW

21kDa

Category

Mouse Monoclonal Antibody

Applications

WB,IHC-P,IF/ICC,ELISA

Cross-Reactivity

Human, Mouse, Rat

Background

BAX (also known as BCL2 Associated X, Bcl-2-Like Protein 4, Bcl2-L-4, BCL2L4) is a member of the BCL2 family of proteins that play a key role in the regulation of apoptosis in higher eukaryotes (https://www.uniprot.org/uniprot/Q07812). BAX comprises 4 Bcl-2 homology domains (BH1-BH4) and a C-terminal transmembrane domain. In healthy mammalian cells, BAX is localized to the cytoplasm through its interaction with the anti-apoptotic BL-2 family members BCL2L1/Bcl-xL. In response to apoptotic stimuli, however, BAX undergoes a conformational change that causes it to translocate to the outer mitochondrial membrane where it initiates the mitochondrial pathway of apoptosis via two potential mechanisms. Firstly, upon translocation to the outer mitochondrial membrane, BAX interacts with the mitochondrial voltage-dependent anion channel (VDAC) leading to the opening of the channel, loss of membrane potential, and the release of cytochrome c from the mitochondrion . The release of cytochrome C into the cytoplasm leads to the activation of Caspase3, initiating apoptosis. Secondly, activated BAX forms homodimers, which then assemble into oligomers on the mitochondrial outer membrane to create pores that permeabilize the mitochondrion leading to the release of cytochrome C.BAX has been shown to be involved in p53-mediated apoptosis. Expression of the human bax gene has been shown to be directly regulated by p53, and the bax promoter contains four motifs with homology to consensus p53-binding sites. Furthermore, p53 directly interacts with BAX to promote its activation.

Recommended Dilutions

WB	1:500 - 1:1000
IHC-P	1:50 - 1:200
IF/ICC	1:50 - 1:200

Immunogen Information

Gene ID	Swiss Prot
581	Q07812

Immunogen

A synthetic peptide corresponding to a sequence within amino acids 1-100 of human Bax (NP 620116.1).

Synonyms

BCL2 Associated X; Bcl-2-Like Protein 4; Bcl2-L-4; BCL2L4; BAX

Contact

www.abclonal.com

Product Information

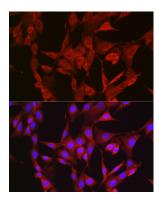
SourceIsotypePurificationRabbitIgGAffinity purification

Storage

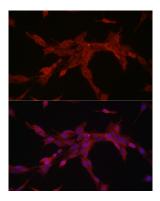
Store at -20°C. Avoid freeze / thaw cycles.

Buffer: PBS with 0.05% proclin300,50% glycerol,pH7.3.

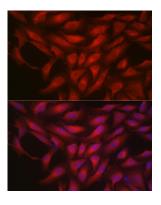
Validation Data



Immunofluorescence analysis of NIH/3T3 cells using Bax Rabbit pAb (A12009) at dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of PC-12 cells using Bax Rabbit pAb (A12009) at dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of U2OS cells using Bax Rabbit pAb (A12009) at dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat Anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.