

A12009

Leader in Biomolecular Solutions for Life Science



Bax Rabbit pAb

Catalog No.: A12009

57 Publications

Basic Information

Observed MW

21kDa

Calculated MW

21kDa

Category

Polyclonal 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 Bcl-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

ELISA Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

581

Swiss Prot

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

Product Information

Source

Rabbit

Isotype

IgG

Purification

Affinity purification

Storage

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

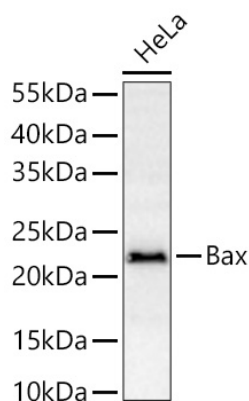
Buffer: PBS with 0.09% Sodium azide, 50% glycerol, pH7.3.

Contact

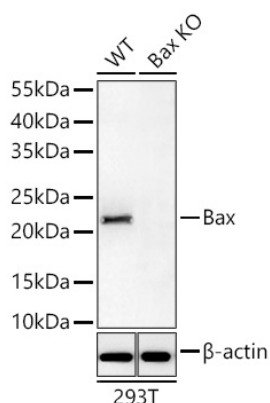


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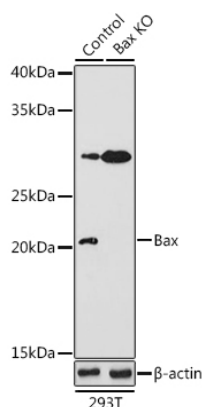
Validation Data



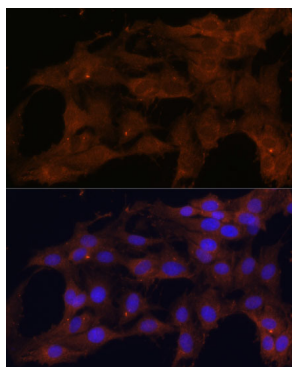
Western blot analysis of lysates from HeLa cells using Bax Rabbit pAb (A12009) at 1:1000 dilution incubated overnight at 4°C.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25 µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 30s.



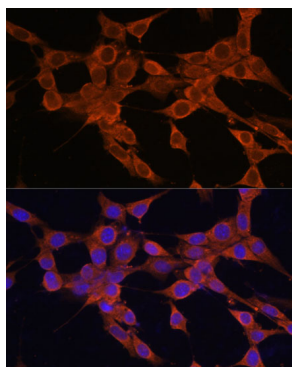
Western blot analysis of lysates from wild type (WT) and Bax knockout (KO) 293T cells using Bax Rabbit pAb (A12009) at 1:1000 dilution incubated overnight at 4°C.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25 µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 30s.



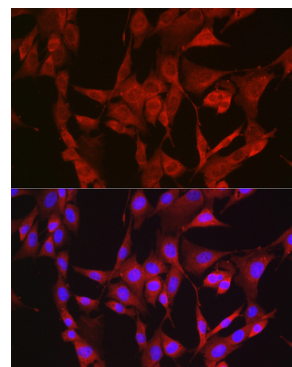
Western blot analysis of lysates from wild type (WT) and Bax knockout (KO) 293T cells, using [KO Validated] Bax Rabbit pAb (A12009) at 1:1000 dilution.
 Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
 Lysates/proteins: 25µg per lane.
 Blocking buffer: 3% nonfat dry milk in TBST.
 Detection: ECL Basic Kit (RM00020).
 Exposure time: 180s.



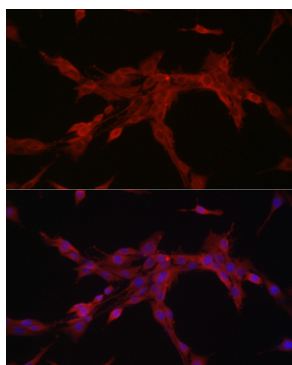
Immunofluorescence analysis of C6 cells using Bax Rabbit pAb (A12009) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



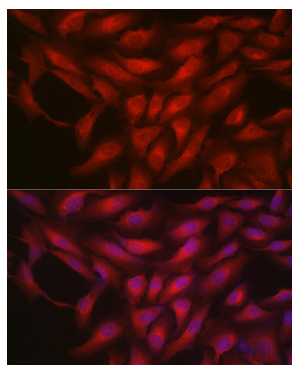
Immunofluorescence analysis of NIH/3T3 cells using Bax Rabbit pAb (A12009) at dilution of 1:100. Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



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