

A0207

Leader in Biomolecular Solutions for Life Science



## [KO Validated] Bax Rabbit pAb

Catalog No.: A0207

KO Validated

298 Publications

### Basic Information

#### Observed MW

21kDa

#### Calculated MW

21kDa

#### Category

Polyclonal Antibody

#### Applications

WB,IHC-P,IF/ICC,IP,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

|               |  |
|---------------|--|
| <b>WB</b>     | 1:500 - 1:1000   |
| <b>IHC-P</b>  | 1:50 - 1:200   |
| <b>IF/ICC</b> | 1:50 - 1:200   |
| <b>IP</b>     | 0.5ug-4ug antibody for<br>200ug-400ug extracts<br>of whole cells   |
| <b>ELISA</b>  | Recommended starting<br>concentration is 1<br>μg/mL. Please optimize<br>the concentration<br>based on your specific<br>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

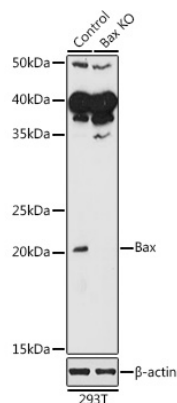
Store at -20°C. Avoid freeze / thaw cycles.

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

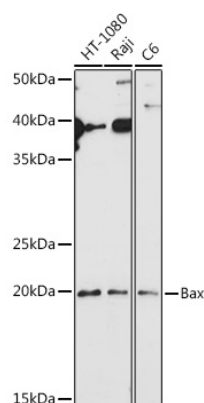
### Contact


[www.abclonal.com](http://www.abclonal.com)

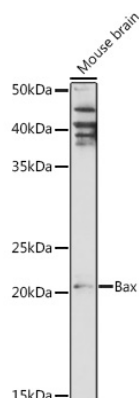
## Validation Data



Western blot analysis of lysates from wild type (WT) and Bax knockout (KO) 293T cells, using [KO Validated] Bax Rabbit pAb (A0207) 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: 10s.

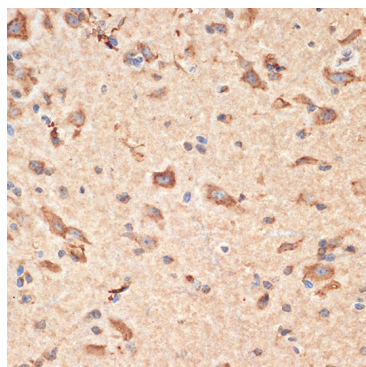


Western blot analysis of various lysates using [KO Validated] Bax Rabbit pAb (A0207) at 1:1000 dilution.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 180s.

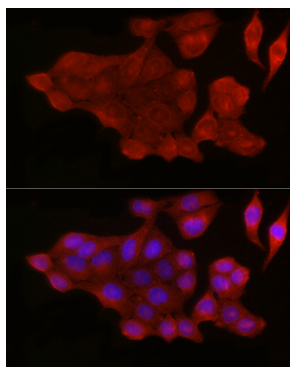


Western blot analysis of lysates from Mouse brain, using [KO Validated] Bax Rabbit pAb (A0207) at 1:1000 dilution.  
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.  
Lysates/proteins: 25µg per lane.  
Blocking buffer: 3% nonfat dry milk in TBST.  
Detection: ECL Basic Kit (RM00020).  
Exposure time: 180s.

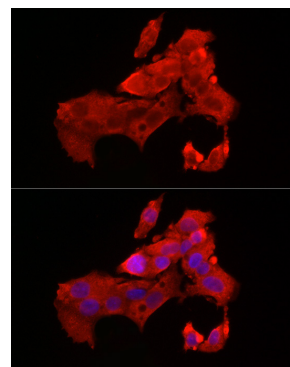
## Validation Data



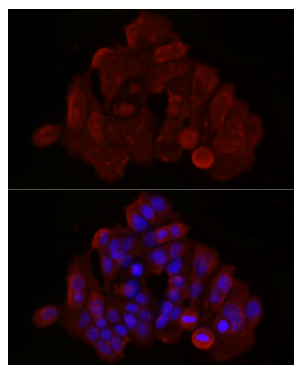
Immunohistochemistry analysis of paraffin-embedded Mouse spinal cord using [KO Validated] Bax Rabbit pAb (A0207) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M Tris/EDTA Buffer (pH 9.0) prior to IHC staining.



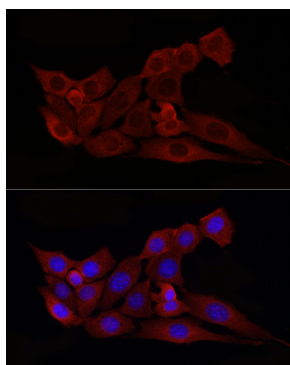
Immunofluorescence analysis of HeLa cells using [KO Validated] Bax Rabbit pAb (A0207) at dilution of 1:50 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



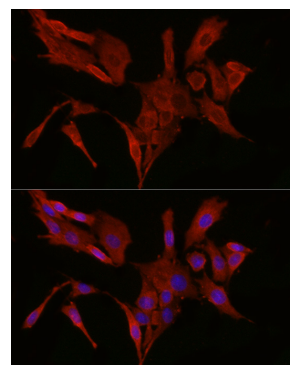
Immunofluorescence analysis of HepG2 cells using [KO Validated] Bax Rabbit pAb (A0207) at dilution of 1:50 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Immunofluorescence analysis of MCF7 cells using [KO Validated] Bax Rabbit pAb (A0207) at dilution of 1:50 (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 NIH/3T3 cells using [KO Validated] Bax Rabbit pAb (A0207) at dilution of 1:50 (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 [KO Validated] Bax Rabbit pAb (A0207) at dilution of 1:50 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.