[KO Validated] Anti-Bax Rabbit pAb

Purified Rabbit Polyclonal Antibody

Catalog # P100018

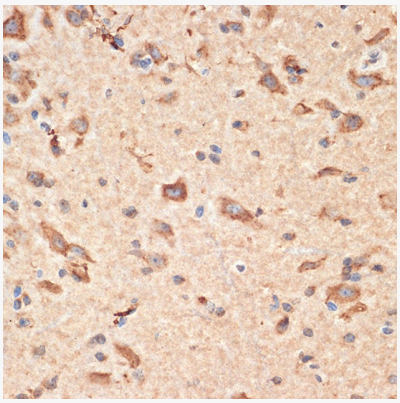
Product Information

Application	WB, IHC-P/IF (Tissue-P), IF (Cell)/ICC, IP, ELISA
Reactivity	Human, Mouse, Rat
Dilution	WB 1:500~1:1,000; IHC-P 1:50~1:200; IF 1:50~1:200; IP 0.5ug-4ug antibody for 200ug-400ug extracts of whole cells
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Label	Unconjugated
Immunogen	A synthetic peptide corresponding to a sequence within amino acids 1-100 of human Bax (NP_620116.1).
Format	Affinity purified polyclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 24 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	Anti-Bax Rabbit pAb is for research use only and not for use in diagnostic or therapeutic procedures.

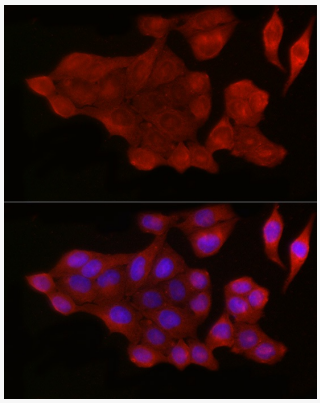
Protein Information

Synonyms	BCL2 Associated X, Bcl-2-Like Protein 4, Bcl2-L-4, BCL2L4,BAX.
Calculated MW	Calculated MW: 21 kDa; Observed MW: 21 kDa
Uniprot ID	Q07812
Gene ID	581
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.

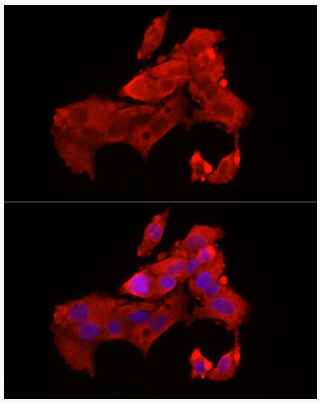
Validation Images



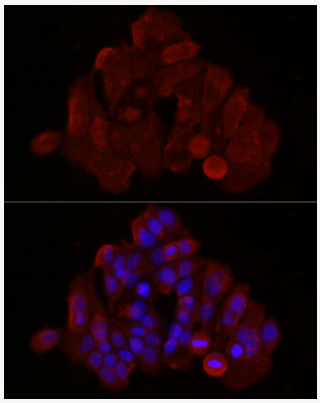
Immunohistochemistry analysis of paraffin-embedded Mouse spinal cord using [KO Validated] Bax Rabbit pAb (P100018) at dilution of 1:100 (40× lens). Microwave antigen retrieval performed with 0.01M Tris/EDTA Buffer (pH 9.0) prior to IHC staining.



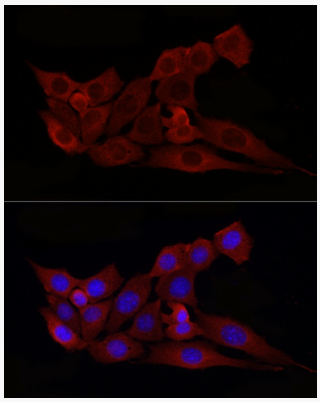
Immunofluorescence analysis of HeLa cells using [KO Validated] Bax Rabbit pAb (P100018) at dilution of 1:50 (40× lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



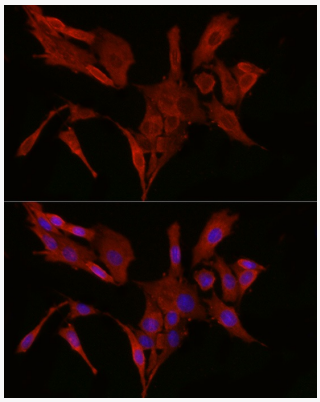
Immunofluorescence analysis of HepG2 cells using [KO Validated] Bax Rabbit pAb (P100018) at dilution of 1:50 (40× lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



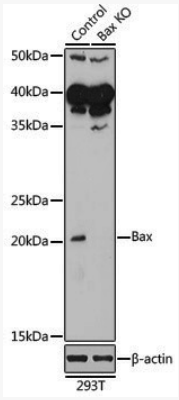
Immunofluorescence analysis of MCF7 cells using [KO Validated] Bax Rabbit pAb (P100018) at dilution of 1:50 (40× lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



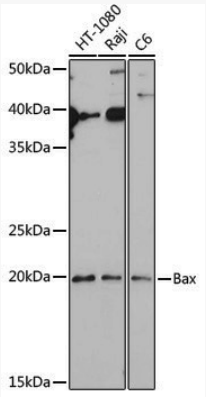
Immunofluorescence analysis of NIH/3T3 cells using [KO Validated] Bax Rabbit pAb (P100018) at dilution of 1:50 (40× lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



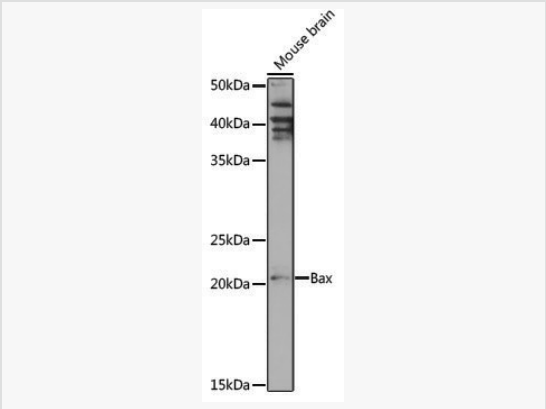
Immunofluorescence analysis of PC-12 cells using [KO Validated] Bax Rabbit pAb (P100018) at dilution of 1:50 (40× lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) at 1:500 dilution. Blue: DAPI for nuclear staining.



Western blot analysis of lysates from wild type (WT) and Bax knockout (KO) 293T cells, using [KO Validated] Bax Rabbit pAb (P100018) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 10s.



Western blot analysis of various lysates using [KO Validated] Bax Rabbit pAb (P100018) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 180s.



Western blot analysis of lysates from Mouse brain , using [KO Validated] Bax Rabbit pAb (P100018) at 1:1,000 dilution.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (LF102) at 1:10,000 dilution.
Lysates/proteins: 25µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Kit.
Exposure time: 180s.