

Specification

Application	WB, FC, ICC
Primary Accession	Q07812
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 21 kDa, observed, 21 kDa kDa
Gene Name	BAX
Aliases	BAX; BCL2 Associated X, Apoptosis Regulator; BCL2L4; BCL2 Associated X Protein; Apoptosis Regulator BAX; Bcl-2-Like Protein 4; Bcl2-L-4; BCL2-Associated X Protein Omega; BCL2-Associated X Protein; Baxdelta2G9omega; Baxdelta2omega; Baxdelta2G9
Immunogen	A synthesized peptide derived from human Bax

Gene ID **581**
Other Names
 Apoptosis regulator BAX, Bcl-2-like protein 4, Bcl2-L-4, BAX, BCL2L4

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

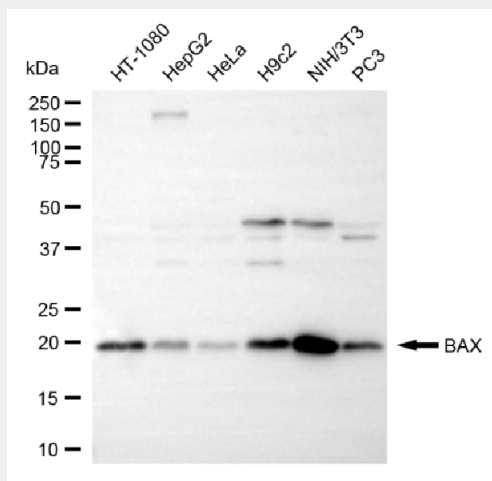
KD-Validated Anti-BAX Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)

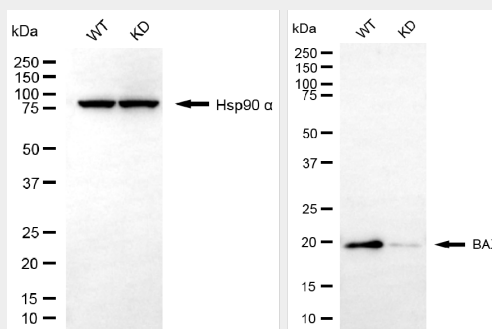
- [Flow Cytometry](#)
- [Cell Culture](#)

KD-Validated Anti-BAX Rabbit Monoclonal Antibody - Images



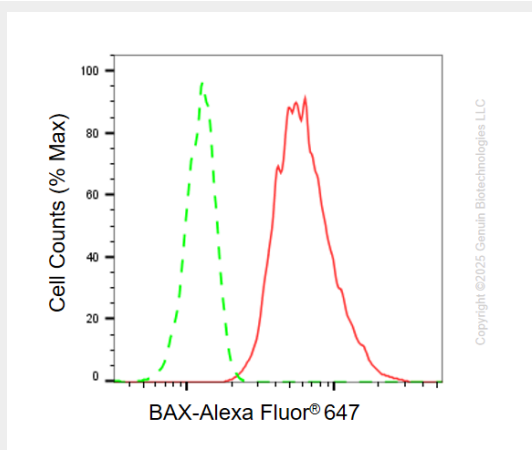
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Western blotting analysis using anti-BAX antibody (Cat#AGI1090). Total cell lysates (10 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-BAX antibody (Cat#AGI1090, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



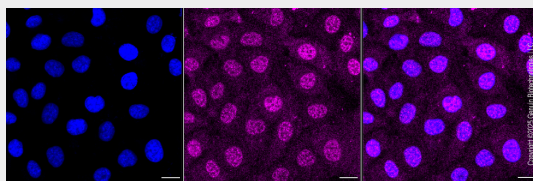
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Western blotting analysis using anti-BAX antibody (Cat#AGI1090). BAX expression in wild type (WT) and BAX knockdown (KD) HSHC cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-BAX antibody (Cat#AGI1090, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



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Flow cytometric analysis of BAX expression in HT-1080 cells using anti-BAX antibody (Cat# AGI1090, 1:2,000). Green, isotype control; red, BAX.



Immunocytochemical staining of HT-1080 cells with anti-BAX antibody (Cat# AGI1090, 1:1000). Nuclei were stained blue with DAPI; BAX was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μ m.