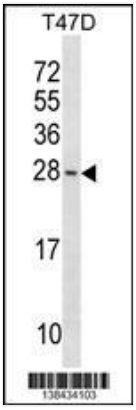
BAX Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	Bax, Polyclonal Antibody
Full Product Name	Bax, ID (BAX, BCL2L4, Apoptosis regulator BAX, Bcl-2-like protein 4) (AP)
Product Gene Name	anti-Bax antibody
Product Synonym Names	BAX; BCL2L4; Apoptosis regulator BAX; Bcl-2-like protein 4
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Alkaline Phosphatase (AP).
Purity/Purification	Purified by Protein A Affinity Chromatography.
Preparation and Storage	Store product at 4 degree C. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	21,184 Da
Chromosome Location	Chromosome: 19; NC_000019.9 (49458117..49465055). Location: 19q13.3-q13.4
OMIM	600040
3D Structure	ModBase 3D Structure for Q07812
Immunogen	Bax antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 68-98 amino acids from the Central region of human Bax.
Conjugate	AP
Note	Preservative Free
Product Categories/Family for anti-Bax antibody	Antibodies; Apoptosis
Applications Tested/Suitable for anti-Bax antibody	Western Blot (WB), ELISA (EIA)
Application Notes for anti-Bax antibody	WB: 1:100-500 ELISA: 1:1,000 Applications are based on unconjugated antibody.
Related Product Information for anti-Bax antibody	The protein encoded by this gene belongs to the BCL2 protein family. BCL2 family members form hetero-or homodimers and act as anti-or pro-apoptotic regulators that are involved in a wide variety of cellular activities. This protein forms a heterodimer with BCL2, and functions as an apoptotic activator. This protein is reported to interact with, and increase the opening of, the mitochondrial voltage-dependent anion channel (VDAC), which leads to the loss in membrane potential and the release of cytochrome c. The expression of this gene is regulated by the tumor suppressor P53 and has been shown to be involved in P53-mediated apoptosis. Multiple alternatively spliced transcript variants, which encode different isoforms, have been reported for this gene.
Product References and Citations for anti-Bax antibody	Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010). Montessuit, S., et al. Cell 142(6):889-901(2010). Ding, J., et al. J. Biol. Chem. 285(37):28749-28763(2010). Ho-Pun-Cheung, A., et al. Pharmacogenomics J. (2010). In press: Yu, D.K., et al. Zhonghua Zhong Liu Za Zhi 32(5):324-327(2010).

Other Notes	Small volumes of anti-Bax antibody vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for Bax purchase	MBS6277680 is an antibody targeting Bax. Also known as Bax, ID (BAX, BCL2L4, Apoptosis regulator BAX, Bcl-2-like protein 4) (AP). Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-Bax antibody
Bax Antibody western blot analysis in T47D cell line lysates (35ug/lane).This demonstrates the Bax antibody detected the Bax protein (arrow).

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for Bax. It may not necessarily be applicable to this product.

NCBI GI #	4757838
NCBI GeneID	581
NCBI Accession #	NP_004315.1
UniProt Primary Accession #	Q07812
UniProt Secondary Accession #	P55269; Q07814; Q07815; Q8WZ49; Q9NR76; Q9NYG7; Q9UCZ6; Q9UCZ7; Q9UQD6; A8K4W1
UniProt Related Accession #	Q07812
GenBank Nucleotide #	NM_004324.3
NCBI Official Full Name	apoptosis regulator BAX isoform beta
NCBI Official Synonym Full Names	BCL2-associated X protein
NCBI Official Symbol	BAX
NCBI Official Synonym Symbols	BCL2L4
UniProt Protein Name	Apoptosis regulator BAX
UniProt Synonym Protein Names	Bcl-2-like protein 4
Protein Family	Apoptosis regulator
UniProt Gene Name	BAX
UniProt Synonym Gene Names	BCL2L4; Bcl2-L-4
UniProt Entry Name	BAX_HUMAN
NCBI Protein Information	apoptosis regulator BAX; bcl2-L-4; bcl-2-like protein 4; BCL2-associated X protein omega; BCL2-associated X protein transcript variant delta2

NCBI Summary for Bax	The protein encoded by this gene belongs to the BCL2 protein family. BCL2 family members form hetero- or homodimers and act as anti- or pro-apoptotic regulators that are involved in a wide variety of cellular activities. This protein forms a heterodimer with BCL2, and functions as an apoptotic activator. This protein is reported to interact with, and increase the opening of, the mitochondrial voltage-dependent anion channel (VDAC), which leads to the loss in membrane potential and the release of cytochrome c. The expression of this gene is regulated by the tumor suppressor P53 and has been shown to be involved in P53-mediated apoptosis. Multiple alternatively spliced transcript variants, which encode different isoforms, have been reported for this gene. [provided by RefSeq, Jul 2008]
UniProt Comments for Bax	BAX: Accelerates programmed cell death by binding to, and antagonizing the apoptosis repressor BCL2 or its adenovirus homolog E1B 19k protein. 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. Promotes activation of CASP3, and thereby apoptosis. Homodimer. Forms higher oligomers under stress conditions. Interacts with BCL2L11. Interaction with BCL2L11 promotes BAX oligomerization and association with mitochondrial membranes, with subsequent release of cytochrome c. Forms heterodimers with BCL2, E1B 19K protein, BCL2L1 isoform Bcl-X(L), BCL2L2, MCL1 and A1. Interacts with SH3GLB1 and HN. Interacts with SFN and YWHAZ; the interaction occurs in the cytoplasm. Under stress conditions, JNK-mediated phosphorylation of SFN and YWHAZ, releases BAX to mitochondria. Isoform Sigma interacts with BCL2A1 and BCL2L1 isoform Bcl-X(L). Interacts with RNF144B, which regulates the ubiquitin-dependent stability of BAX. Interacts with CLU under stress conditions that cause a conformation change leading to BAX oligomerization and association with mitochondria. Does not interact with CLU in unstressed cells. Interacts with FAIM2/LFG2. Interacts with human cytomegalovirus/HHV-5 protein vMIA/UL37. 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. Belongs to the Bcl-2 family. 8 isoforms of the human protein are produced by alternative splicing. Protein type: Tumor suppressor; Mitochondrial; Membrane protein, integral; Apoptosis Chromosomal Location of Human Ortholog: 19q13.3-q13.4 Cellular Component: mitochondrial permeability transition pore complex; pore complex; endoplasmic reticulum membrane; mitochondrial outer membrane; mitochondrion; membrane; endoplasmic reticulum; nuclear envelope; nucleus; cytosol Molecular Function: identical protein binding; protein binding; protein homodimerization activity; protein heterodimerization activity; channel activity; BH3 domain binding; lipid binding Biological Process: hypothalamus development; viral reproduction; regulation of cell cycle; positive regulation of apoptosis; response to toxin; germ cell programmed cell death; myeloid cell homeostasis; B cell apoptosis; germ cell development; regulation of mammary gland epithelial cell proliferation; spermatid differentiation; regulation of mitochondrial membrane potential; development of secondary sexual characteristics; protein insertion into mitochondrial membrane during induction of apoptosis; establishment and/or maintenance of transmembrane electrochemical gradient; negative regulation of neuron apoptosis; negative regulation of protein binding; kidney development; release of cytochrome c from mitochondria; positive regulation of B cell apoptosis; regulation of protein homodimerization activity; vagina development; protein oligomerization; fertilization; unfolded protein response, activation of signaling protein activity; induction of apoptosis via death domain receptors; DNA damage response, signal transduction resulting in induction of apoptosis; retina development in camera-type eye; negative regulation of fibroblast proliferation; reduction of endoplasmic reticulum calcium ion concentration; glycosphingolipid metabolic process; cerebral cortex development; mitochondrial fragmentation during apoptosis; regulation of nitrogen utilization; post-embryonic camera-type eye morphogenesis; positive regulation of pigmentation; regulation of protein heterodimerization activity; T cell homeostatic proliferation; apoptosis; negative regulation of peptidyl-serine phosphorylation; positive regulation of apoptosis involved in mammary gland involution; neuron migration; release of matrix enzymes from mitochondria; response to salt stress; positive regulation of protein oligomerization; apoptotic mitochondrial changes; B cell homeostatic proliferation; B cell homeostasis; ovarian follicle development; positive regulation of neuron apoptosis; response to gamma radiation; B cell negative selection; response to axon injury; protein homooligomerization; caspase activation; transformed cell apoptosis; mitochondrial fusion; Sertoli cell proliferation; odontogenesis of dentine-containing teeth; endoplasmic reticulum calcium ion homeostasis; neuron apoptosis; homeostasis of number of cells within a tissue; blood vessel remodeling; retinal cell programmed cell death; positive regulation of release of sequestered calcium ion into cytosol; caspase activation via cytochrome c

Research Articles on Bax	**1.** Immunohistochemical determination of bax may be helpful for the typing of ovarian tumors as benign, borderline and malignant or serous and mucinous.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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