

## **Bax Polyclonal Antibody**

Catalog No: YT0459

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: Bax

**Fields:** >>EGFR tyrosine kinase inhibitor resistance;>>Endocrine

resistance;>>Platinum drug resistance;>>Sphingolipid signaling pathway;>>p53

signaling pathway;>>Protein processing in endoplasmic

reticulum;>>Apoptosis;>>Longevity regulating pathway;>>Apoptosis - multiple species;>>Necroptosis;>>Neurotrophin signaling pathway;>>Non-alcoholic fatty

liver disease;>>AGE-RAGE signaling pathway in diabetic complications;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Pathogenic Escherichia coli infection;>>Shigellosis;>>Salmonella infection;>>Tuberculosis;>>Hepatitis C;>>Hepatitis B;>>Measles;>>Human cytomegalovirus infection;>>Influenza

A;>>Human papillomavirus infection;>>Human T-cell leukemia virus 1

infection;>>Kaposi sarcoma-associated herpesvirus infection;>>Herpes simplex virus 1 infection;>>Epstein-Barr virus infection;>>Human immunodeficiency virus

1 infection;>>Pathways in cancer;>>Transcriptional

Gene Name: BAX

**Protein Name :** Apoptosis regulator BAX

Human Gene Id: 581

**Human Swiss Prot** Q07812

No:

Mouse Gene Id: 12028

**Mouse Swiss Prot** 

No:

Rat Swiss Prot No: Q63690

Immunogen: The antiserum was produced against synthesized peptide derived from human

Bax. AA range:1-50

Q07813



**Specificity:** Bax Polyclonal Antibody detects endogenous levels of Bax protein.

**Formulation:** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 22kD

Cell Pathway: Stem cell pathway

**Background:** The protein encoded by BAX (BCL2 associated X, apoptosis regulator) 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 BAX.

**Function:** disease:Defects in BAX are found in some cell lines from hematopoietic

malignancies as T-cell acute lymphoblastic leukemia, Burkitt lymphoma, and plasmacytoma.,domain:Intact BH3 motif is required by BIK, BID, BAK, BAD and BAX for their pro-apoptotic activity and for their interaction with anti-apoptotic members of the Bcl-2 family.,function:Accelerates programmed cell death by binding to, and antagonizing the apoptosis repressor BCL2 or its adenovirus homolog E1B 19k protein. Induces the release of cytochrome c, activation of CASP3, and thereby apoptosis.,similarity:Belongs to the Bcl-2 family.,subcellular location:Colocalizes with 14-3-3 proteins in the cytoplasm. Under stress

conditions, redistributes to the mitochondrion membrane through the release from JNK-phosphorylated 14-3-3 proteins., subunit: Homodimer. Forms heterodimers

with BCL2, E1B 19K protein, BCL2L1 isoform Bcl-X(L), MCL1

Subcellular Location:

[Isoform Alpha]: Mitochondrion outer membrane; Single-pass membrane protein. Cytoplasm. Colocalizes with 14-3-3 proteins in the cytoplasm. Under stress conditions, undergoes a conformation change that causes release from JNK-

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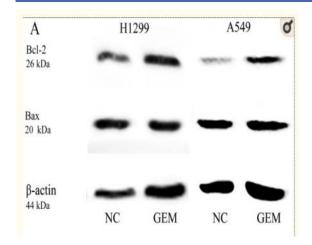


phosphorylated 14-3-3 proteins and translocation to the mitochondrion membrane. Upon Sendai virus infection, recruited to the mitochondrion through interaction with IRF3 (PubMed:25609812). .; [Isoform Beta]: Cytoplasm.; [Isoform Delta]: Cytoplasm.

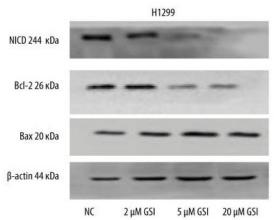
## **Expression:**

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.

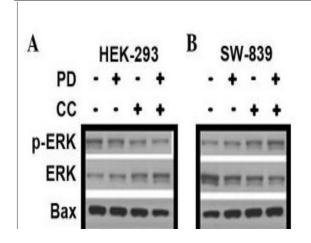
## **Products Images**



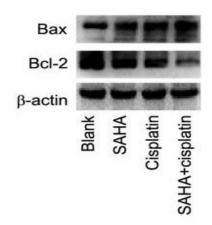
Hu, Bi-Dan, et al. "Specific inhibitor of Notch-3 enhances the sensitivity of NSCLC cells to gemcitabine." Oncology reports40.1 (2018): 155-164.



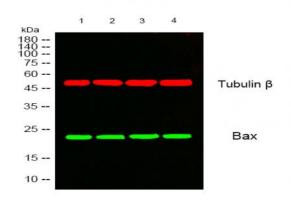
He, Fenglian, et al. "Synergistic effect of Notch-3-specific inhibition and paclitaxel in non-small cell lung cancer (NSCLC) cells via activation of the intrinsic apoptosis pathway." Medical science monitor: international medical journal of experimental and clinical research 23 (2017): 3760.



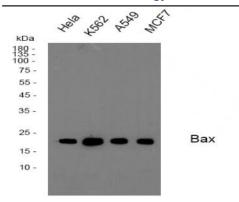
Chen, Xiao-Meng, et al. "Chelerythrine chloride induces apoptosis in renal cancer HEK-293 and SW-839 cell lines." Oncology letters 11.6 (2016): 3917-3924.



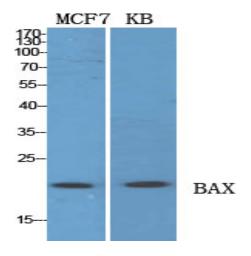
Hou, Mengyi, et al. "Synergistic antitumor effect of suberoylanilide hydroxamic acid and cisplatin in osteosarcoma cells." Oncology letters 16.4 (2018): 4663-4670.



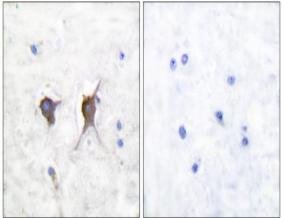
Western blot analysis of lysates from 1) Hela , 2) MCF7 , 3) k562 , 4) A549 cells,  $\center{cells}$  Green primary antibody was diluted at 1:1000, 4° over night, secondary antibody(cat:RS23920)was diluted at 1:10000, 37° 1hour.  $\center{cells}$  Red Tubulin  $\center{gather}$  Monoclonal Antibody(5G3) (cat:YM3030) antibody was diluted at 1:5000 as loading control, 4° over night, secondary antibody(cat:RS23710)was diluted at 1:10000, 37° 1hour.



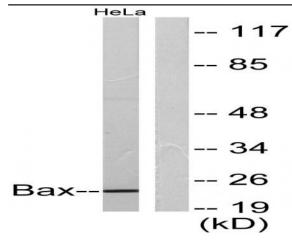
Western blot analysis of Bax Polyclonal Antibody, using Hela, MCF7,k562,A549 cell, 4° over night, secondary antibody(cat: RS0002 was diluted at 1:10000, 37° 1hour.



Western Blot analysis of various cells using Bax Polyclonal Antibody diluted at 1:2000



Immunohistochemistry analysis of paraffin-embedded human brain tissue, using Bax Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from HeLa cells, using Bax Antibody. The lane on the right is blocked with the synthesized peptide.