

# Bax (YTH6A7): sc-80658

## BACKGROUND

The Bcl-2 gene was isolated at the chromosomal breakpoint of t-bearing follicular B cell lymphomas. Bcl-2 blocks cell death following a variety of stimuli and confers a death-sparing effect to certain hematopoietic cell lines following growth factor withdrawal. Bcl-2 is localized to outer mitochondrial membranes and endoplasmic reticulum as well as nuclear membranes. A related protein, designated Bax (Bcl-associated X protein), has extensive amino acid homology with Bcl-2 and both homodimerizes and forms heterodimers with Bcl-2. Overexpression of Bax accelerates apoptotic death induced by cytokine deprivation in an IL-3 dependent cell line and Bax also counters the death repressor activity of Bcl-2.

## REFERENCES

1. Bakhshi, A., et al. 1985. Cloning the chromosomal breakpoint of t(14;18) human lymphomas: clustering around  $J_H$  on chromosome 14 and near a transcriptional unit on 18. *Cell* 41: 899-906.
2. Vaux, D.L., et al. 1988. Bcl-2 promotes the survival of haemopoietic cells and cooperates with c-Myc to immortalize pre-B cells. *Nature* 335: 440-442.

## CHROMOSOMAL LOCATION

Genetic locus: BAX (human) mapping to 19q13.33; Bax (mouse) mapping to 7 B4.

## SOURCE

Bax (YTH6A7) is a mouse monoclonal antibody raised against the N-terminal residues 12-24 common to human, mouse and rat Bax protein.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## APPLICATIONS

Bax (YTH6A7) is recommended for detection of Bax of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for Bax siRNA (h): sc-29212, Bax siRNA (m): sc-29213, Bax shRNA Plasmid (h): sc-29212-SH, Bax shRNA Plasmid (m): sc-29213-SH, Bax shRNA (h) Lentiviral Particles: sc-29212-V and Bax shRNA (m) Lentiviral Particles: sc-29213-V.

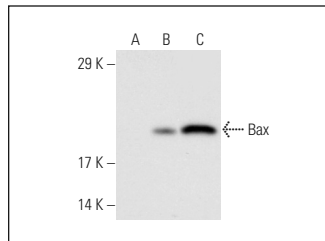
Molecular Weight of Bax: 23 kDa.

Positive Controls: Bax (m): 293T Lysate: sc-126476, HuT 78 whole cell lysate: sc-2208 or CTLL-2 cell lysate: sc-2242.

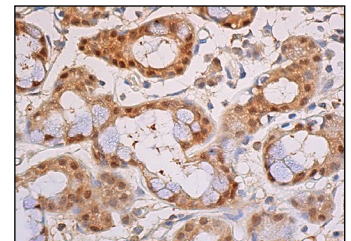
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgG $\kappa$  BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

## DATA



Bax (YTH6A7): sc-80658. Western blot analysis of Bax expression in non-transfected 293T: sc-117752 (A), mouse Bax transfected 293T: sc-126476 (B) and HuT 78 (C) whole cell lysates.



Bax (YTH6A7): sc-80658. Immunoperoxidase staining of formalin fixed, paraffin-embedded human salivary gland tissue showing cytoplasmic and nuclear staining of glandular cells.

## SELECT PRODUCT CITATIONS

1. Surgucheva, I., et al. 2008. Effect of  $\gamma$ -synuclein silencing on apoptotic pathways in retinal ganglion cells. *J. Biol. Chem.* 283: 36377-36385.
2. Neher, M.D., et al. 2014. Deficiency of complement receptors CR2/CR1 in  $Cr2^{-/-}$  mice reduces the extent of secondary brain damage after closed head injury. *J. Neuroinflammation* 11: 95.
3. Si, L., et al. 2017. Isoliquiritigenin induces apoptosis of human bladder cancer T24 cells via a cyclin-dependent kinase-independent mechanism. *Oncol. Lett.* 14: 241-249.
4. Zhu, D., et al. 2018. MicroRNA-1180 is associated with growth and apoptosis in prostate cancer via TNF receptor associated factor 1 expression regulation and nuclear factor- $\kappa$ B signaling pathway activation. *Oncol. Lett.* 15: 4775-4780.
5. Xiao, M., et al. 2018. Deoxydopodophyllotoxin induces cell cycle arrest and apoptosis in human cholangiocarcinoma cells. *Oncol. Lett.* 16: 3177-3182.
6. Restivo, I., et al. 2020. Anti-proliferative activity of a hydrophilic extract of manna from *Fraxinus angustifolia* Vahl through mitochondrial pathway-mediated apoptosis and cell cycle arrest in human colon cancer cells. *Molecules* 25: E5055.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.