

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



# Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

# Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

# SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in



# Bcl-2 (h): 293T Lysate: sc-176463



The Power to Question

#### **BACKGROUND**

Apoptosis is defined as a set of cascades which, when initiated, programs the cell to undergo lethal changes such as membrane blebbing, mitochondrial breakdown and DNA fragmentation. Bcl-2 is one among many key regulators of apoptosis, which are essential for proper development, tissue homeostasis and protection against foreign pathogens. Human Bcl-2 is an anti-apoptotic, membrane-associated oncoprotein that can promote cell survival through protein-protein interactions with other Bcl-2 related family members, such as the death suppressors Bcl-x<sub>L</sub>, Mcl-1, Bcl-w and A1 or the death agonists Bax, Bak, Bik, Bad and BID. The anti-apoptotic function of Bcl-2 can also be regulated through proteolytic processing and phosphorylation. Bcl-2 may promote cell survival by interfering with the activation of the cytochrome c/Apaf-1 pathway through stabilization of the mitochondrial membrane. Mutations in the Bcl-2 gene can contribute to cancers where normal physiological cell death mechanisms are compromised by deregulation of the anti-apoptotic influence of Bcl-2.

### **REFERENCES**

- Kerr, J.F., et al. 1972. Apoptosis: a basic biological phenomenon with wide-ranging implications in tissue kinetics. Br. J. Cancer 26: 239-257.
- Hockenbery, D., et al. 1990. Bcl-2 is an inner mitochondrial membrane protein that blocks programmed cell death. Nature 348: 334-336.
- Alnemri, E.S., et al. 1992. Overexpressed full length human Bcl-2 extends the survival of baculovirus-infected Sf9 insect cells. Proc. Natl. Acad. Sci. USA 89: 7295-7299.
- 4. Reed, J.C. 1994. Bcl-2 and the regulation of programmed cell death. J. Cell Biol. 124: 1-6.
- Yang, J., et al. 1997. Prevention of apoptosis by Bcl-2: release of cytochrome c from mitochondria blocked. Science 275: 1129-1132.
- Adams, J.M., et al. 1998. The Bcl-2 protein family: arbiters of cell survival. Science 281: 1322-1326.
- 7. Ojala, P.M., et al. 2000. The apoptotic v-cyclin-Cdk6 complex phosphorylates and inactivates Bcl-2. Nat. Cell Biol. 2: 819-825.
- 8. Huang, Z. 2000. Bcl-2 family proteins as targets for anticancer drug design. Oncogene 19: 6627-6631.
- 9. Shroff, E.H., et al. 2007. Role of Bcl-2 family members in anoxia induced cell death. Cell Cycle 6: 807-809.

## CHROMOSOMAL LOCATION

Genetic locus: BCL2 (human) mapping to 18q21.33.

# **PRODUCT**

Bcl-2 (h): 293T Lysate represents a lysate of human Bcl-2 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

#### **STORAGE**

Store at -20 $^{\circ}$  C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

#### **APPLICATIONS**

Bcl-2 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Bcl-2 antibodies. Recommended use:  $10-20 \mu l$  per lane.

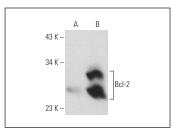
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

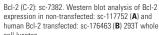
Bcl-2 (C-2): sc-7382 is recommended as a positive control antibody for Western Blot analysis of enhanced human Bcl-2 expression in Bcl-2 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

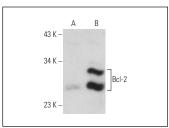
### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

### **DATA**







Bcl-2 (SPM117): sc-56018. Western blot analysis of Bcl-2 expression in non-transfected: sc-117752 (**A**) and human Bcl-2 transfected: sc-176463 (**B**) 293T whole call lyeates.

## **RESEARCH USE**

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

# **PROTOCOLS**

See our web site at www.scbt.com for detailed protocols and support products.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 Fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com