

Technical Data Sheet

Purified Hamster Anti-Mouse Bcl-2

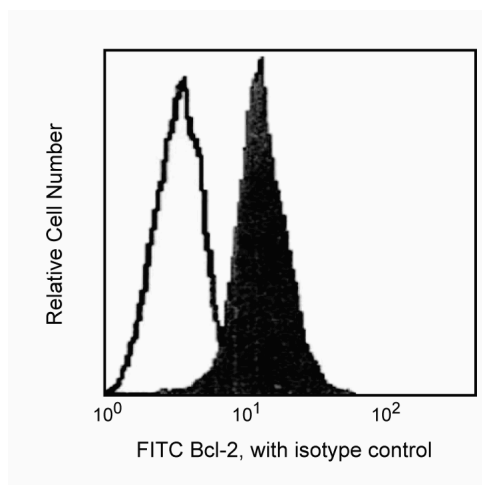
Product Information

Material Number:	554218
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	3F11
Immunogen:	Recombinant Mouse Bcl-2
Isotype:	Armenian Hamster IgG1
Reactivity:	QC Testing: Mouse
Target MW:	26 kDa
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

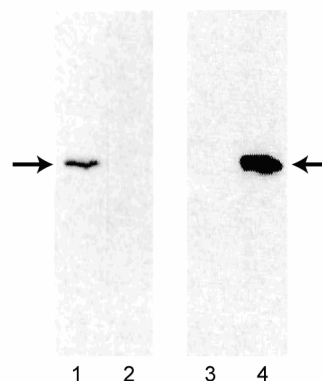
Description

Bcl-2 is considered to be novel among proto-oncogenes because it blocks apoptosis (programmed cell death) in many cell types. Apoptosis is an active form of cellular suicide that typically requires new RNA and protein synthesis and is associated with distinct morphological changes including cell shrinkage, cytoplasm membrane blebbing, nuclear fragmentation and DNA degradation. The Bcl-2 gene was first found in t(14:18) containing follicular B-cell lymphomas. A high proportion of these lymphomas contain t(14:18) chromosomal translocations involving the human Bcl-2 gene. Translocation of Bcl-2 sequences from chromosome 18 onto the transcriptionally active immunoglobulin locus at chromosome band 14q32 in B-cells deregulates Bcl-2 gene expression, resulting in high levels of Bcl-2 mRNA and protein expression. Because Bcl-2 blocks apoptosis it may contribute to tumorigenesis by prolonging cell survival rather than by accelerating the rate of cell proliferation. Mouse Bcl-2 migrates at a reduced molecular weight of ~26 kD.

This antibody recognizes a 26 kD band representing the mouse p26-Bcl-2 protein. Additional minor bands at 27-31 kD and 18-21 kD may be visualized. The 27-31 kD upper band may represent a larger isoform, whereas the 18-21 kD lower band may be an internal translation or proteolytic product. 3F11 does not cross-react with human Bcl-2. For detection of human Bcl-2, refer to clone 6C8 (Cat. No. 551051), or clone 4D7 (Cat. No. 554202).



Profile of M1 mouse myeloma cells analyzed on a FACScan™ (BDIS, San Jose, CA). Cells were stained with anti-mouse Bcl-2-FITC (clone 3F11) or a hamster IgG-FITC isotype control.



Western blot analysis of Bcl-2 expression using 3F11 and 6C8 monoclonal antibodies in human and mouse thymocytes. Probing of total organ lysates illustrates that 3F11 (Cat. No. 554218) recognized mouse (arrow, lane 1) but not human Bcl-2 (lane 2), and that 6C8 (Cat. No. 551051) recognized human (arrow, lane 4) but not mouse Bcl-2 (lane 3).

Preparation and Storage

Store undiluted at 4°C.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2008 BD



Application Notes

Application

Western blot	Routinely Tested
Flow cytometry	Reported
Fluorescence microscopy	Reported
Immunohistochemistry-frozen	Reported
Immunoprecipitation	Reported

Recommended Assay Procedure:

Reported ranges for usage in western blot and IHC on frozen sections, is around 5 µg/ml. The antibody should be titrated for each application. Thymus and M1 mouse myeloma cells (ATCC TIB-192) are suggested as positive controls. For immunofluorescent staining and flow cytometry, the directly conjugated formats of this clone are recommended (Cat No. 554221 and 556537).

Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
556537	PE Hamster Anti-Mouse Bcl-2 Set	100 tests	(none)
554221	FITC Hamster Anti-Mouse Bcl-2 Set	100 tests	(none)
554012	Horse radish Peroxidase (HRP) Mouse Anti-Armenian and Syrian Hamster IgG Cocktail	1.0 ml	(none)
551051	Purified Hamster Anti-Human Bcl-2	50 µg	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Although hamster immunoglobulin isotypes have not been well defined, BD Biosciences Pharmingen has grouped Armenian and Syrian hamster IgG monoclonal antibodies according to their reactivity with a panel of mouse anti-hamster IgG mAbs. A table of the hamster IgG groups, Reactivity of Mouse Anti-Hamster Ig mAbs, may be viewed at http://www.bdbiosciences.com/pharmingen/hamster_chart_11x17.pdf.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

References

Hockenbery D, Nuñez G, Millman C, Schreiber RD, Korsmeyer SJ. Bcl-2 is an inner mitochondrial membrane protein that blocks programmed cell death. *Nature*. 1990; 348(6299):334-336. (Biology)

Krajewski S, Tanaka S, Takayama S, Schibler MJ, Fenton W, Reed JC. Investigation of the subcellular distribution of the bcl-2 oncoprotein: residence in the nuclear envelope, endoplasmic reticulum, and outer mitochondrial membranes. *Cancer Res*. 1993; 53(19):4701-4714. (Biology)

Miyashita T, Krajewski S, Krajewska M, et al. Tumor suppressor p53 is a regulator of bcl-2 and bax gene expression in vitro and in vivo. *Oncogene*. 1994; 9(6):1799-1805. (Biology)

Novack DV, Korsmeyer SJ. Bcl-2 protein expression during murine development. *Am J Pathol*. 1994; 145(1):61-73. (Clone-specific: Immunohistochemistry, Western blot)

Oltvai ZN, Millman CL, Korsmeyer SJ. Bcl-2 heterodimerizes in vivo with a conserved homolog, Bax, that accelerates programmed cell death. *Cell*. 1993; 74(4):609-619. (Clone-specific: Immunoprecipitation)

Reed JC, Tsujimoto Y, Alpers JD, Croce CM, Nowell PC. Regulation of bcl-2 proto-oncogene expression during normal human lymphocyte proliferation. *Science*. 1987; 236(4806):1295-1299. (Biology)

Tsujimoto Y, Cossman J, Jaffe E, Croce CM. Involvement of the bcl-2 gene in human follicular lymphoma. *Science*. 1985; 228(4706):1440-1443. (Biology)

Veis DJ, Sentman CL, Bach EA, Korsmeyer SJ. Expression of the Bcl-2 protein in murine and human thymocytes and in peripheral T lymphocytes. *J Immunol*. 1993; 151(5):2546-2554. (Immunogen: Flow cytometry, Fluorescence microscopy, Immunohistochemistry, Western blot)

Veis DJ, Sorenson CM, Shutter JR, Korsmeyer SJ. Bcl-2-deficient mice demonstrate fulminant lymphoid apoptosis, polycystic kidneys, and hypopigmented hair. *Cell*. 1993; 75(2):229-240. (Clone-specific: Western blot)

Williams GT. Programmed cell death: apoptosis and oncogenesis. *Cell*. 1991; 65(7):1097-1098. (Biology)