Technical Data Sheet FITC Hamster Anti-Mouse Bcl-2 Set

Product Information

Material Number:	554221
Size:	100 tests
Reactivity:	QC Testing: Mouse
Component:	51-15024X
Description:	FITC Hamster Anti-Mouse Bcl-2
Size:	100 tests (1 ea)
Vol. per Test:	20 µl
Clone Name:	3F11
Immunogen:	Recombinant Mouse Bcl-2
Isotype:	Armenian Hamster IgG1
Storage Buffer:	Aqueous buffered solution containing BSA and $\leq 0.09\%$ sodium azide.
Component:	51-66994X
Description:	FITC Hamster IgG Isotype Control (Anti-Trinitrophenol (TNP))
Size:	100 tests (1 ea)
Vol. per Test:	20 µl
Clone Name:	A19-3
Immunogen:	TNP-keyhole limpet hemocyanin
Isotype:	Armenian Hamster IgG1, ĸ
Storage Buffer:	Aqueous buffered solution containing BSA and $\leq 0.09\%$ sodium azide.

Description

Programmed cell death (apoptosis) is a normal physiologic process which occurs during embryonic development as well as in maintenence of tissue homeostasis. The apoptotic program is characterized by certain morphological features. These include changes in the plasma membrane such as loss of membrane asymmetry and attachment, a condensation of the cytoplasm and nucleus, and internucleosomal cleavage of DNA. In the final stages, the dying cells become fragmented into "apoptotic bodies" which are rapidly eliminated by phagocytic cells without eliciting significant inflammatory damage to surrounding cells. Members of the Bcl-2 family play a major role in regulating the cellular response to apoptotic signals. Bcl-2 is considered to be a novel proto-oncogene because it blocks apoptosis in many cell types. Bcl-2 is thought to provide selective survival advantage for cells by blocking apoptosis and thus may contribute to tumorigenesis. Bcl-2 is a 26 kD intracellular, integral membrane protein found primarily in the nuclear envelope, endoplasmic reticulum and outer mitochondrial membrane.

Clone 3F11 reacts with mouse Bcl-2. It does not cross-react with human Bcl-2. Gel purified recombinant mouse Bcl-2 protein was used as immunogen.

Clone A19-3 is an Armenian hamster IgG isotype control which is specific for the hapten trinitrophenol (TNP). This hapten is not expressed on human cells or human cell lines. The solutions are free of unconjugated antibody. The 3F11 and A19-3 FITC conjugates are matched in F/P ratios. The optimum F/P ratio was experimentally determined by flow cytometric analysis.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with FITC under optimum conditions, and unreacted FITC was removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

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

Application Notes

Аррисацой		
Flow cytometry	Routinely Tested	
Western blot	Reported	
Immunoprecipitation	Reported	
Immunohistochemistry-frozen	Reported	
Immunofluorescence	Reported	

Recommended Assay Procedure:

M1 mouse myeloblast cells (ATCC TIB 191) are recommended as a positive control for this application.

Product Notices

- 1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use $1 \times 10e6$ cells in a 100- μ l experimental sample (a test).
- 2. This antibody has been optimized and preassayed with its matched isotype control to be used at the recommended volume of 20 ul/test. Titration of the reagents or substituting with other (non-matched) isotype control is NOT recommended.
- 3. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 4. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 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.
- 6. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 7. 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.

References

Alexander-Miller MA, Derby MA, Sarin A, Henkart PA, Berzofsky JA. Supraoptimal peptide-major histocompatibility complex causes a decrease in bc1-2 levels and allows tumor necrosis factor alpha receptor II-mediated apoptosis of cytotoxic T lymphocytes. *J Exp Med.* 1998; 188(8):1391-1399. (Clone-specific: Western blot) 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)

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, Milliman 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)

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)

Yang J, Liu X, Bhalla K, et al. Prevention of apoptosis by Bcl-2: release of cytochrome c from mitochondria blocked. *Science*. 1997; 275(5303):1129-1132. (Biology)