

Technical Data Sheet

Purified Mouse Anti-Human Bcl-2 w/Control

Product Information

Material Number:	551109
Size:	150 µg
Reactivity:	QC Testing: Human
Component:	51-6511GR
Description:	Purified Mouse Anti-Human Bcl-2
Size:	50 µg (3 ea)
Concentration:	0.25 mg/ml
Clone Name:	Bcl-2/100
Immunogen:	Human Bcl-2 synthetic peptide aa. 41-54
Isotype:	Mouse IgG1, κ
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.
Component:	51-16526N
Description:	Jurkat Cell Lysate
Size:	50 µg (1 ea)
Concentration:	1.0 mg/ml
Storage Buffer:	SDS-PAGE buffer (62mM Tris pH 6.8, 2% SDS, 0.9% b-mercaptoethanol, 0.003% bromophenol blue, 5% glycerol)

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. Because Bcl-2 blocks apoptosis it may contribute to tumorigenesis by prolonging cell survival, rather than by accelerating the rate of cell proliferation. Human Bcl-2 protein migrates at a molecular weight of ~26 kDa by SDS-PAGE. Bcl-2/100 recognizes a 26 kDa band representing human Bcl-2. Additional minor bands at 27-31 kDa and 18-21 kDa may also be visualized. The 27-31 kDa upper band may represent a larger isoform, whereas the 18-21 kDa lower band may be an internal translation or proteolytic product, therefore, a synthetic peptide corresponding to amino acids 41-54 (GAAPAPGIFSSQPG) of human Bcl-2 was used as immunogen. This peptide sequence is not conserved between human and mouse. Bcl-2/100 does not cross-react with mouse Bcl-2. For detection of mouse Bcl-2 refer to clone 3F11 (Cat. No. 554218), polyclonal rabbit anti-rat/mouse Bcl-2 antiserum (Cat. No. 554087), and polyclonal rabbit anti-mouse Bcl-2 antiserum (Cat. No. 554279).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20°C.

Application Notes

Application

Western blot	Routinely Tested
Flow cytometry	Tested During Development
Immunohistochemistry-formalin (antigen retrieval required)	Tested During Development
Immunohistochemistry-frozen	Tested During Development

Recommended Assay Procedure:

For paraffin-embedded sections, tissues should be fixed in either Bouin's fixative or formalin. Jurkat control lysate [50 µg (1 µg/µl)] is provided as a western blot positive control (Comp. No. 51-16526N; store lysate at -20°C). Additional control lysate (Cat. No. 611451) is sold separately. For flow cytometric analysis our directly conjugated formats are recommended. (Cat. No. 556535 and 556357).

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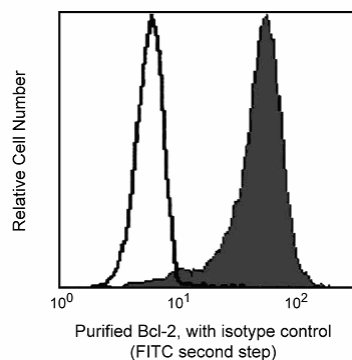
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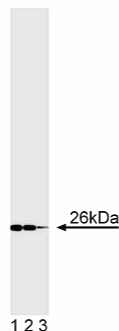
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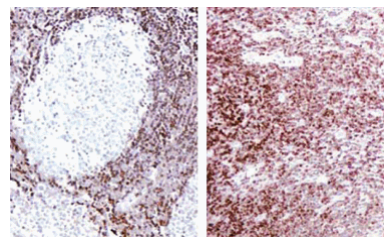




Profile of permeabilized lymphocytes analyzed on a FACScan (BDIS, San Jose, CA) (left panel). Cells were stained with anti-human Bcl-2 (clone Bcl-2/100) or a mouse IgG1 isotype (negative) control followed by FITC-conjugated second step.



Western blot analysis of Bcl-2 (right panel). Lysate from Jurkat cells was probed with clone Bcl-2/100 at concentrations of 1.0 (lane 1), 0.5 (lane 2), and 0.125 µg/ml (lane 3). Bcl-2 is identified as a band of ~26 kDa.



Formalin-fixed, paraffin-embedded tissue sections stained for Bcl-2 expression using clone Bcl-2/100 and the SA-HRP method. (Left panel) Normal tonsil. (Right panel) Follicular lymphoma. In normal tonsil the mantle zone and intrafollicular region are stained; only occasional Bcl-2 positive cells are seen in the germinal center. In follicular lymphoma, tumor follicles are Bcl-2 positive.

Suggested Companion Products

Catalog Number	Name	Size	Clone
611451	Jurkat Cell Lysate	500 µg	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
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. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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