

Technical Data Sheet

V450 Mouse Anti-Human Bcl-2

Product Information

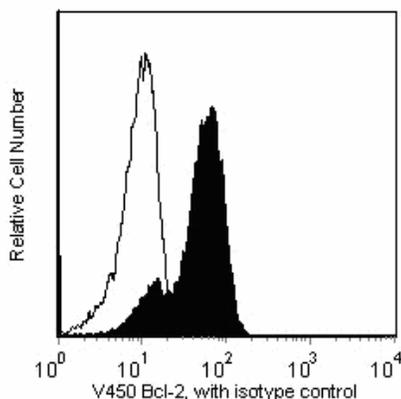
Material Number:	560637
Size:	50 tests
Vol. per Test:	5 µl
Clone:	Bcl-2/100
Immunogen:	Human Bcl-2 synthetic peptide aa. 41-54
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Storage Buffer:	Aqueous buffered solution containing protein stabilizer and ≤0.09% sodium azide.

Description

Programmed cell death (apoptosis) is a normal physiologic process which occurs during embryonic development as well as in maintenance 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 response of cells to apoptotic signals. Bcl-2 is considered to be novel among proto-oncogenes 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 kDa intracellular, integral membrane protein found primarily in the nuclear envelope, endoplasmic reticulum and outer mitochondrial membrane.

Clone Bcl-2/100 reacts with human Bcl-2. It has been reported not to cross-react with mouse Bcl-2. A synthetic peptide corresponding to amino acids 41-54 (GAAPAPGIFSSQPG) of human Bcl-2 was used as the immunogen. This peptide sequence reportedly is not conserved between human and mouse.

The antibody is conjugated to BD Horizon™ V450, which has been developed for use in multicolor flow cytometry experiments and is available exclusively from BD Biosciences. It is excited by the Violet laser Ex max of 406 nm and has an Em Max at 450 nm. Conjugates with BD Horizon™ V450 can be used in place of Pacific Blue™ conjugates.



Flow cytometric analysis for Bcl-2 in human PBMC.
Human PBMC were fixed and permeabilized using BD Cytofix/Cytoperm™ (Cat. No. 554714) followed by staining either with a BD Horizon™ V450 Mouse IgG1, κ isotype control (unshaded) or with the BD Horizon™ V450 Mouse Anti-Human Bcl-2 antibody (shaded). Histograms were derived from gated events based on light scattering characteristics for lymphocytes. Flow cytometry was performed on a BD™ LSR II flow cytometry system.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

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

The antibody was conjugated with BD Horizon™ V450 under optimum conditions, and unreacted BD Horizon™ V450 was removed.

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Application Notes

Application

Intracellular staining (flow cytometry)

Routinely Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
560373	V450 Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21
555899	Lysing Buffer	100 ml	(none)
554714	BD Cytotfix/Cytoperm™ Fixation/Permeabilization Kit	250 tests	(none)
554722	Fixation and Permeabilization Solution	125 ml	(none)
554723	Perm/Wash Buffer	100 ml	(none)

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1×10^6 cells in a 100- μ l experimental sample (a test).
2. An isotype control should be used at the same concentration as the antibody of interest.
3. BD Horizon™ V450 has a maximum absorption of 406 nm and maximum emission of 450 nm. Before staining with this reagent, please confirm that your flow cytometer is capable of exciting the fluorochrome and discriminating the resulting fluorescence.
4. 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.
5. Pacific Blue™ is a trademark of Molecular Probes, Inc., Eugene, OR.
6. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at wwwbdbiosciences.com/colors.
7. Please refer to wwwbdbiosciences.com/pharmingen/protocols for technical protocols.

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