

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Bcl-2 in Western blots.
Source	Monoclonal Mouse IgG ₁ Clone # 118701
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Bcl-2 minus the carboxyl-terminal mitochondrial targeting sequence Met1-Asp211 Accession # P10415
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

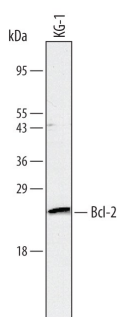
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1-0.5 µg/mL	See Below
Simple Western	5 µg/mL	See Below

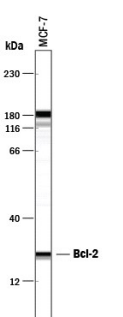
DATA

Western Blot




Detection of Human Bcl-2 Minus C-Terminus by Western Blot.
Western blot shows lysates of KG-1 human acute myelogenous leukemia cell line. PVDF membrane was probed with 0.1-0.5 µg/mL of Mouse Anti-Human Bcl-2 Minus C-Terminus Monoclonal Antibody (Catalog # MAB827) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Bcl-2 Minus C-Terminus at approximately 24 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western



Detection of Human Bcl-2 by Simple Western™. Simple Western lane view shows lysates of MCF-7 human breast cancer cell line, loaded at 0.5 mg/mL. A specific band was detected for Bcl-2 at approximately 24 kDa (as indicated) using 5 µg/mL of Mouse Anti-Human Bcl-2 Minus C-Terminus Monoclonal Antibody (Catalog # MAB827). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Bcl-2 is a member of a family of proteins that regulates outer mitochondrial membrane permeability (1, 2). Bcl-2 is an anti-apoptotic member that prevents release of cytochrome c from the mitochondria intermembrane space into the cytosol. Bcl-2 is present on the outer mitochondrial membrane and is also found on other membranes in some cell types. Natural Bcl-2 contains a carboxyl-terminal mitochondria targeting sequence. Recombinant Bcl-2, missing the mitochondrial targeting sequence, maintains its ability to neutralize pro-apoptotic Bcl-2 family members. Neutralization by Bcl-2 appears to be through binding the BH3 region of pro-apoptotic Bcl-2 family members. This activity does not require the mitochondrial targeting sequence.

References:

1. Gross, A. *et al.* (1999) *Genes and Develop.* **13**:1899.
2. Kroemer, G. (1997) *Nature Med.* **3**:614.