

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Bcl-2 Minus C-Terminus. Neutralizes recombinant human (rh) Bcl-2 bioactivity but not rhBcl-w or rhBcl-x bioactivity.
Source	Monoclonal Mouse IgG ₁ Clone # 118712
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
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.

Neutralization	Measured by its ability to neutralize Recombinant Human Bcl-2 (Catalog # 827-BC) inhibition of caspase-8-cleaved Recombinant Human BID (Catalog # 882-B8) induced release of cytochrome c from isolated mouse liver mitochondria using the Rat/Mouse Cytochrome c Quantikine ELISA Kit (Catalog # MCTC0).
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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.