

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human Bcl-x _L in direct ELISAs and detects human, mouse, and rat Bcl-x _L in Western blots.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2052A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Bcl-x _L Met1-Arg212 Accession # Q07817
Formulation	Supplied as a solution in PBS containing BSA, Glycerol and Sodium Azide. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or 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	0.5 µg/mL	See Below
Simple Western	5 µg/mL	See Below

DATA

Western Blot

Detection of Bcl-x_L by Western Blot.
Western blot shows lysates of K562 human chronic myelogenous leukemia cell line, Jurkat human acute T cell leukemia cell line, C6 rat glioma cell line, and RAW 264.7 mouse monocyte/macrophage cell line. PVDF membrane was probed with 0.5 µg/mL of Rabbit Anti-Human/Mouse/Rat Bcl-x_L Monoclonal Antibody (Catalog # MAB894) followed by HRP-conjugated Anti-Rabbit IgG Secondary Antibody (Catalog # HAF008). A specific band was detected for Bcl-x_L at approximately 25 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Simple Western

Detection of Human Bcl-x_L by Simple Western™. Simple Western lane view shows lysates of K562 human chronic myelogenous leukemia cell line and NIH-3T3 mouse embryonic fibroblast cell line, loaded at 0.2 mg/mL. A specific band was detected for Bcl-x_L at approximately 33 kDa (as indicated) using 5 µg/mL of Rabbit Anti-Human/Mouse/Rat Bcl-x_L Monoclonal Antibody (Catalog # MAB894). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. 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 opening. • 6 months, -20 to -70 °C under sterile conditions after opening.

BACKGROUND

Bcl-x_L is a member of the Bcl-2 family of proteins that regulates outer mitochondrial membrane permeability (1, 2). Bcl-x_L is an anti-apoptotic member that prevents release of cytochrome c from the mitochondria intermembrane space into the cytosol. Bcl-x_L is present on the outer mitochondrial membrane and is also found on other membranes in some cell types. Natural Bcl-x_L contains a carboxyl-terminal mitochondria targeting sequence. Recombinant Bcl-x_L missing the mitochondrial targeting sequence maintains its ability to neutralize pro-apoptotic Bcl-2 family members. Neutralization by Bcl-x_L appears to be mediated 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.

PRODUCT SPECIFIC NOTICES

* Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to SDS for additional information and handling instructions.