Human/Mouse Bcl-2 Antibody  
Antigen Affinity-purified Polyclonal Goat IgG  
Catalog Number: AF810

**DESCRIPTION**

**Species Reactivity:** Human/Mouse  
**Specificity:** Detects human and mouse Bcl-2 in Western blots.  
**Source:** Polyclonal Goat IgG  
**Purification:** Antigen Affinity-purified  
**Immunogen:** E. coli-derived recombinant mouse Bcl-2  
**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 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.

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<th>Application</th>
<th>Recommended Concentration</th>
<th>Sample</th>
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<td>Western Blot</td>
<td>1 µg/mL</td>
<td>See Below</td>
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<tr>
<td>Immunohistochemistry</td>
<td>5-15 µg/mL</td>
<td>See Below</td>
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<tr>
<td>Immunoprecipitation</td>
<td>1 µg/10^6 cells</td>
<td>See Below</td>
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<td>Simple Western</td>
<td>50 µg/mL</td>
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**DATA**

**Western Blot**

Detection of Human/Mouse Bcl-2 by Western Blot. Western blot shows lysates of KG-1 human myeloid leukemia cell line and M-NFS-60 mouse myelogenous leukemia lymphoblast cell line following incubation with 1 µg/mL of Goat Anti-Human/Mouse Bcl-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF810) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF017). A specific band was detected for Bcl-2, at approximately 25 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblotting Buffer Group 2.

**Immunohistochemistry**

Bcl-2 in Human Breast Cancer Tissue. Bcl-2 was detected in immunofluorescently stained sections of human breast cancer tissue using 15 µg/mL Goat Anti-Human Mouse Bcl-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF810) overnight at 4 °C. Tissue was stained (red) and counterstained with hematoxylin (blue). View our protocol for Chromogenic IHC Staining of Paraffin-embedded Tissue Sections.

**Immunoprecipitation**

Immunoprecipitation of Mouse Bcl-2. Bcl-2 was immunoprecipitated from lysates (3 x 10^6 cells) of M-NFS-60 mouse myelogenous leukemia lymphoblast cell line following incubation with 1 µg/mL of Goat Anti-Human/Mouse Bcl-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF810) for 1 hour at 4 °C. Bcl-2-antibody complexes were absorbed using Protein G (Sigma). Immunoprecipitated Bcl-2 was detected by Western blot using 1 µg/mL Goat Anti-Human/Mouse Bcl-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF810). View our recommended buffer recipes for immunoprecipitation.

**Simple Western**

Detection of Human Bcl-2 by Simple Western™. Simple Western lane view shows lysates of KG-1 human acute myelogenous leukemia cell line, loaded at 0.2 mg/mL. A specific band was detected for Bcl-2 at approximately 23 kDa (as indicated) using 50 µg/mL of Goat Anti-Human/Mouse Bcl-2 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF810) followed by 1:20 dilution of HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF109). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.

**PREPARATION AND STORAGE**

**Reconstitution**

Reconstitute at 0.2 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.

- 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:**