## Bcl-2

Concentrated and Prediluted Monoclonal Antibody 902-003-103020



Available Product Formats				
Format	Catalog Number	Description	Dilution	Diluent
Concentrate	ACR 003 A, C	0.1, 1.0 mL	1:100	Da Vinci Green
Predilute	APR 003 AA	6.0 mL	Ready-to-use	N/A
UltraLine – For BenchMark	AVR 003 G	6.0 mL	Ready-to-use	N/A

#### **Intended Use:**

For Research Use Only. Not for use in diagnostic procedures.

# **Summary and Explanation:**

Bcl-2 [100/D5] mouse antibody is highly specific to bcl-2 (alpha) and shows no cross-reaction with bcl-x or bax protein. Bcl-2 (b-cell lymphoma #2) is a proto-oncogene located at 18q21.3. Expression of bcl-2 alpha oncoprotein has been shown to inhibit the programmed cell death (apoptosis). In most follicular lymphomas, neoplastic germinal centers express high levels of bcl-2 protein, whereas the normal or hyperplastic germinal centers are negative.

## **Principle of Procedure:**

Antigen detection in tissues and cells is a multi-step immunohistochemical process. The initial step binds the primary antibody to its specific epitope. After labeling the antigen with a primary antibody, a one-, two- or three-step detection procedure can be employed. The one-step procedure will feature an enzyme-labeled polymer that binds to the primary antibody. A two-step procedure will feature a secondary antibody added to bind to the primary antibody. An enzyme-labeled polymer is then added to bind to the secondary antibody. The three-step detection procedure will feature a secondary antibody added to bind to the primary antibody followed by a linker antibody step for maximum binding. An enzyme-labeled polymer is then added to bind to the linker antibody. These detections of the bound antibodies are evidenced by a colorimetric reaction.

Source: Mouse monoclonal

Species Reactivity: Human; others not tested

Clone: 100/D5 Isotype: IgG1/kappa

**Protein Concentration:** Call for lot specific Ig concentration.

Epitope/Antigen: bcl-2a

Cellular Localization: Cytoplasmic and nuclear membrane Positive Tissue Control: Follicular lymphomas or tonsil

**Known Applications:** 

Immunohistochemistry (formalin-fixed paraffin-embedded tissues)

Supplied As: Buffer with protein carrier and preservative

Storage and Stability:

Store at 2°C to 8°C. The product is stable to the expiration date printed on the label, when stored under these conditions. Do not use after expiration date. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C.

# <u>Staining Protocol Recommendations (intelliPATH FLX® and manual use):</u>

**Peroxide Block:** Block for 5 minutes with Peroxidazed 1.

**Pretreatment:** Perform heat retrieval using Borg Decloaker or Reveal Decloaker. Refer to the Borg Decloaker or Reveal Decloaker product data sheet for specific instructions.

**Protein Block (Optional):** Incubate for 5-10 minutes at RT with Background Punisher.

**Primary Antibody:** Incubate for 30-45 minutes at RT. **Probe:** Incubate for 10 minutes at RT with a probe. **Polymer:** Incubate for 10-20 minutes at RT with a polymer.

**Chromogen:** Incubate for 5 minutes at RT with Biocare's DAB -OR—

Incubate for 5-7 minutes at RT with Warp Red.

# <u>Staining Protocol Recommendations (intelliPATH FLX and manual use) Cont'd:</u>

### Counterstain:

Counterstain with hematoxylin. Rinse with deionized water. Apply Tacha's Bluing Solution for 1 minute. Rinse with deionized water.

#### **Technical Note:**

This antibody, for intelliPATH FLX and manual use, has been standardized with MACH 4 detection system. Use TBS for washing steps

# Staining Protocol Recommendations (Ventana BenchMark ULTRA):

AVR003 is intended for use with the BenchMark ULTRA. Refer to the User Manual for specific instructions for use. Recommended protocol parameters are as follows:

Template/Detection: OptiView DAB IHC Pretreatment Protocol: CC1 64 minutes Peroxidase: Pre Primary Peroxidase Inhibitor Primary Antibody: 32 minutes, 36°C

### **Limitations:**

This product is provided for Research Use Only (RUO) and is not for use in diagnostic procedures. Suitability for specific applications may vary and it is the responsibility of the end user to determine the appropriate application for its use.

### Precautions:

- 1. This antibody contains less than 0.1% sodium azide. Concentrations less than 0.1% are not reportable hazardous materials according to U.S. 29 CFR 1910.1200, OSHA Hazard communication and EC Directive 91/155/EC. Sodium azide (NaN $_3$ ) used as a preservative is toxic if ingested. Sodium azide may react with lead and copper plumbing to form highly explosive metal azides. Upon disposal, flush with large volumes of water to prevent azide build-up in plumbing. (Center for Disease Control, 1976, National Institute of Occupational Safety and Health, 1976) (7)
- 2. Specimens, before and after fixation, and all materials exposed to them should be handled as if capable of transmitting infection and disposed of with proper precautions. Never pipette reagents by mouth and avoid contacting the skin and mucous membranes with reagents and specimens. If reagents or specimens come in contact with sensitive areas, wash with copious amounts of water. (8)
- 3. Microbial contamination of reagents may result in an increase in nonspecific staining.
- 4. Incubation times or temperatures other than those specified may give erroneous results. The user must validate any such change.
- 5. Do not use reagent after the expiration date printed on the vial.
- $\hbox{6. The SDS is available upon request and is located at $http://biocare.net.}\\$

# **Technical Support:**

Contact Biocare's Technical Support at 1-800-542-2002 for questions regarding this product.

### References:

- 1. Alderson LM, *et al.* Human gliomas with wild-type p53 express bcl-2. Cancer Research. 1995 Mar 1, 55(5):999-1001.
- 2. Hurlimann J, *et al.* bcl-2 protein in invasive ductal breast carcinomas. Virchows Archiv. 1995, 426(2):163-8.

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#### References Cont'd:

- 3. Symmans WF, *et al.* Transformation of follicular lymphoma. Expression of p53 and bcl-2 oncoprotein, apoptosis and cell proliferation. Acta Cytologica. 1995 Jul-Aug, 39 (4):673-82.
- 4. Triscott JA, *et al.* Immunoreactivity for bcl-2 protein in cutaneous lymphomas and lymphoid hyperplasias. Journal of Cutaneous Pathology. 1995 Feb, 22(1):2-10.
- 5. Bhargava V, *et al.* Bcl-2 immunoreactivity in breast carcinoma correlates with hormone receptor positivity. American Journal of Pathology. 1994 Sep, 145(3):535 -40.
- 6. Joensuu H, Pylkkanen L, Toikkanen S. Bcl-2 protein expression and long-term survival in breast cancer. Am J of Pathology. 1994, 145(5):1191-8.
- 7. Center for Disease Control Manual. Guide: Safety Management, NO. CDC-22, Atlanta, GA. April 30, 1976 "Decontamination of Laboratory Sink Drains to Remove Azide Salts."
- 8. Clinical and Laboratory Standards Institute (CLSI). Protection of Laboratory Workers from Occupationally Acquired Infections; Approved Guideline-Fourth Edition CLSI document M29-A4 Wayne, PA 2014.
- VP Echelon Series antibodies are developed solely by Biocare Medical LLC and do not imply approval or endorsement of Biocare's antibodies by Ventana Medical Systems, Inc. Biocare and Ventana are not affiliated, associated or related in any way. Ventana®, BenchMark®, ultraView and OptiView are trademarks of Roche.

