

# Bcl-2; Clone 100/D5 (Ready-To-Use)

<b>Availability/Contents:</b>	<u><b>Item #</b></u>	<u><b>Volume</b></u>
	A00119-0002	2 ml
	A00119-0007	7 ml
	A00119-0025	25 ml

**Description:**

**Species:** Mouse

**Immunogen:** A synthetic peptide corresponding to amino acids 41-54 (GAAPAPGIFSSQPG-Cys), of human Bcl-2 was used as immunogen to generate the antibody; GenBank no. NP\_000648.2 (Pezzella et al, 1990). This sequence is 100% conserved in the human alpha (239 aa) and beta (205 aa) isoforms. Note: this antibody clone is designated as 100 in the Pezzella publication.

**Clone:** 100/D5

**Isotype:** Mouse IgG1, Kappa

**Format:** This antibody has been pretitered and quality controlled to work on formalin-fixed paraffin-embedded as well as acetone fixed cryostat tissue sections. No further titration is required.

**Specificity:** Human Bcl-2 alpha is a 239 amino acid (aa) protein and human Bcl-2 beta is a 205 aa protein. The 100/D5 antibody [also known as clone Bcl-2/100 (Kren, 2004, Kaur, 2004)] recognizes both Bcl-2 isoforms (Pezzela et al, 1990).

**Background:** Bcl-2 (Bcl2) is the founding member of the Bcl-2 family. Family members have pivotal roles in regulating apoptosis or death signaling pathways through their control of mitochondrial permeability and cytochrome release (reviewed in Anvekar, 2011; Martinou and Youle, 2011). Bcl-2 derives its name from B cell lymphoma 2 where was first found to be highly expressed in follicular lymphomas with 14;18 reciprocal translocations. There are two isoforms, alpha and beta, generated by alternative splicing and differing in their carboxy termini. Human Bcl-2 alpha is a 239 amino acid (aa) protein and human Bcl-2 beta is a 205 aa protein. The 100/D5 antibody [also known as clone Bcl-2/100 (Kren, 2004, Kaur, 2004)] recognizes both Bcl-2 isoforms (Pezzela et al, 1990).  
  
Bcl-2 is over expressed in neoplastic germinal centers of a majority of follicular lymphomas, whereas the normal or hyperplastic germinal centers are primarily negative for Bcl-2 expression. Upregulation has also been described in a number of other types of tumors. Bcl-2 expression is often considered to be a marker of cell death status, and over or high expression has often been tied to anti-apoptotic states, or resistance to death. However, the actual status of vulnerability to death can depend on the balance of other Bcl-2 family members present, their interaction with one another, as well as other factors.

**Species Reactivity:** Human, Monkey. Others not tested.


**Positive Control:** Tonsil.

**Cellular Localization:** Cytoplasmic & Cell Membrane.

**Titer/Working Dilution:** No further dilution is required.


**Microbiological State:** This product is not sterile.

Storage: 2° C  8° C

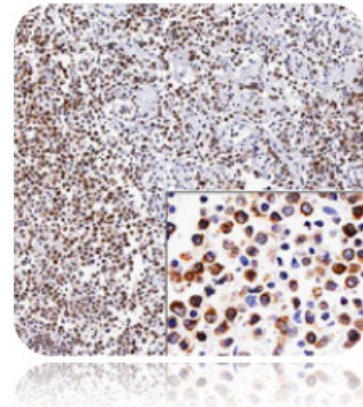


ScyTek Laboratories, Inc.  
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Logan, UT 84321  
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**CE**

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**Uses/Limitations:** Not to be taken internally.  
 For Research Use Only.  
 This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.  
 Do not use if reagent becomes cloudy.  
 Do not use past expiration date.  
 Use caution when handling reagents.  
 Non-Sterile.



Ordering Information and Current Pricing at [www.scytek.com](http://www.scytek.com)


**Procedure:**


1. **Tissue Section Pretreatment REQUIRED:** Staining of formalin fixed, paraffin embedded tissue sections is enhanced by pretreatment with EDTA-Saline Buffer (10X Concentrate); pH 8.0 (ScyTek catalog# ETA500).
2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
3. **Visualization:** For maximum staining intensity we recommend the “UltraTek HRP Anti-Polyvalent Lab Pack” (ScyTek catalog# UHP125, see IFU for instructions) combined with the “DAB Chromogen/Substrate Bulk Pack (High Contrast)” (ScyTek catalog# ACV500, see IFU for instructions).

**Precautions:** Contains Sodium Azide as a preservative (0.09% w/v).  
 Do not pipette by mouth.  
 Avoid contact of reagents and specimens with skin and mucous membranes.  
 Avoid microbial contamination of reagents or increased nonspecific staining may occur.  
 This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.


**References:**

1. Pezzella et al. AJP 137:225-232 (1990). WB: Fig 1 (normal human spleen), the Bcl-2 alpha isoform was detected in both reducing and non-reducing conditions. IHC (frozen)/ IHC (paraffin)/ IF/ICC: Various human cell types and tissues: Figs 2,7 and Tables 1-3. See publication for specific staining details.
2. Kren et al. Appl Immunohistochem Mol Morphol. 12:44-49 (2004). IHC (paraffin): lung cancer.
3. Kaur et al. Arch Pathol Lab Med 128:39-43 (2004). IHC (paraffin): Prostate adenocarcinoma, Figs 2,3.
4. Tralongo et al. J Med Case Reports doi:10.1186/1752-1947-6-24 (2012) IHC (paraffin): follicular lymphoma, results discussed. An example of a primary follicular lymphoma negative for Bcl-2 expression.
5. Moshovi et al. Pediatr Neurosurg 47:241–247 (2011). IHC (paraffin): Embryonal tumors, Table 1.
6. Martinou JC and RJ Youle. Dev Cell 21:92-101 (2011).
7. Anvekar et al. Frontiers in Oncol doi: 10.3389/fonc.2011.00034 (2011).

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Instructions For Use  
A00119-IFU-RUO

Rev. Date: Jan. 12, 2013

Revision: 1

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**Warranty:**

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Storage: 2° C




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