

# Datasheet: MCA1550 BATCH NUMBER 152139

Description:	MOUSE ANTI HUMAN Bcl-2	
Specificity:	Bcl-2	
Format:	Purified	
Product Type:	Monoclonal Antibody	
Clone:	100	
Isotype:	IgG1	
Quantity:	0.1 mg	

## **Product Details**

#### **Applications**

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	Yes	No	<b>Not Determined</b>	Suggested Dilution
Flow Cytometry (1)	•			1/50 - 1/100
Immunohistology - Frozen				1/20 - 1/40
Immunohistology - Paraffin (2)				1/20 - 1/40
ELISA			•	
Immunoprecipitation	•			
Western Blotting				

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

- (1) Membrane permeabilisation is required for this application. Bio-Rad recommends the use of Leucoperm<sup>™</sup> (Product Code <u>BUF09</u>) for this purpose.
- (2) This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.

Sodium citrate buffer pH 6.0 is recommended for this purpose.

Target Species	Human
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture

	supernatant
Buffer Solution	Phosphate b
Preservative	0.000/ 0

Phosphate buffered saline

0.09% Sodium Azide

Carrier Free

**Stabilisers** 

Yes

Approx. Protein Concentrations

IgG concentration 1.0 mg/ml

Immunogen

Synthetic peptide, amino acids 41-54 of the Bcl-2 protein

External Database Links

**UniProt:** 

P10415 Related reagents

**Entrez Gene:** 

596 BCL2 Related reagents

**RRID** 

AB\_2064303

#### **Specificity**

**Mouse anti Human Bcl-2 antibody, clone 100** recognizes the human Apoptosis regulator Bcl-2 oncoprotein, a 239 amino acid ~25kDa integral single pass membrane protein containing 4 <u>BH motifs</u> which lies within the cell rather than on the cell surface. The protein is localised in the outer mitochondrial membrane and plays a role in the inhibition of apoptosis.

Mouse anti Human Bcl-2, clone 100 reacts with small B lymphocytes in the mantle zone and many cells within T cell areas. Very few cells in germinal centres are stained. In the thymus many cells in the medulla are stained but the cortex shows weak or negative staining. In non-haematopoietic tissues few cells are stained (<a href="Krajewski et al. 1995">Krajewski et al. 1995</a>). Mouse anti Human Bcl-2 antibody, clone 100 reacts with neoplastic cells of follicular lymphoma and anaplastic large cell lymphoma (<a href="Reed 1997">Reed 1997</a>).

Mouse anti human Bcl-2, clone 100 has been successfully used to demonstrate Bcl-2 in formalin fixed, paraffin embedded tissues of radioresistant squamous cell carcinoma by immunohistochemistry (Condon et al. 2002).

Flow Cytometry

Use 10ul of the suggested working dilution to label 1x10<sup>6</sup> cells in 100ul.

**Histology Positive Control Tissue** 

Human tonsil

### References

- 1. Cleary, M.L. *et al.* (1986) Cloning and structural analysis of cDNAs for bcl-2 and a hybrid bcl-2/immunoglobulin transcript resulting from the t(14;18) translocation. <u>Cell. 47:19-28.</u>
- 2. Hockenbery, D. et al. (1990) Bcl-2 is an inner mitochondrial membrane protein that

blocks programmed cell death. Nature. 348 (6299): 334-6.

- 3. Chylicki, K. *et al.* (2000) Characterization of the molecular mechanisms for p53-mediated differentiation. Cell Growth Differ. 11: 561-71.
- 4. Shenker, B.J. ,i>et al. (2001) Induction of apoptosis in human T cells by Actinobacillus actinomycetemcomitans cytolethal distending toxin is a consequence of G2 arrest of the cell cycle. <u>J Immunol</u>. 167: 435-41.
- 5. lannone, F. *et al.* (2005) Increased Bcl-2/p53 ratio in human osteoarthritic cartilage: a possible role in regulation of chondrocyte metabolism. <u>Ann Rheum Dis. 64: 217-21.</u>
- 6. Iscache, A.L. *et al.* (2011) Effects of BCL-2 over-expression on B cells in transgenic rats and rat hybridomas. Int Immunol. 23 (10): 625-36.
- 7. Valgimigli, M. *et al.* (2003) Serum from patients with acute coronary syndromes displays a proapoptotic effect on human endothelial cells: a possible link to pan-coronary syndromes. Circulation. 107: 264-70.
- 8. Berrieman, H.K. *et al.* (2005) The expression of Bcl-2 family proteins differs between nonsmall cell lung carcinoma subtypes. <u>Cancer. 103: 1415-9.</u>
- 9. Fimognari, C. *et al.* (2002) Growth inhibition, cell-cycle arrest and apoptosis in human T-cell leukemia by the isothiocyanate sulforaphane. <u>Carcinogenesis</u>. 23: 581-6.

#### Storage

Store at +4°C or at -20°C if preferred.

This product should be stored undiluted.

Storage in frost free freezers is not recommended. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1550">https://www.bio-rad-antibodies.com/SDS/MCA1550</a> 10040
Regulatory	For research purposes only

## Related Products

## **Recommended Secondary Antibodies**

Rabbit Anti Mouse IgG (STAR12...) RPE

Goat Anti Mouse IgG IgA IgM (STAR87...) HRP

Goat Anti Mouse IgG (STAR76...) RPE

Rabbit Anti Mouse IgG (STAR13...) HRP

Goat Anti Mouse IgG (STAR70...) FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

DyLight®650, DyLight®680, DyLight®800,

FITC, HRP

Rabbit Anti Mouse IgG (STAR9...) <u>FITC</u>

Goat Anti Mouse IgG (STAR77...) HRP

# Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

# **Recommended Negative Controls**

#### MOUSE IgG1 NEGATIVE CONTROL (MCA928)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 Tel: +44 (0)1865 852 700
 Europe
 Tel: +49 (0) 89 8090 95 21

 America
 Fax: +1 919 878 3751
 Fax: +44 (0)1865 852 739
 Fax: +49 (0) 89 8090 95 50

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M365406:200529'

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