

# **BCL-2** Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1430a

#### **Product Information**

**Application** IHC, FC, ICC, E

Primary Accession P10415

**Reactivity** Human, Mouse

Host Mouse
Clonality Monoclonal
Clone Names 8E12
Isotype IgG1
Calculated MW 26266

**Description** This gene encodes an integral outer mitochondrial membrane protein that

blocks the apoptotic death of some cells such as lymphocytes. Constitutive expression of BCL2, such as in the case of translocation of BCL2 to Ig heavy chain locus, is thought to be the cause of follicular lymphoma. Tissue

specificity: Expressed in a variety of tissues.

**Immunogen** Synthetic peptide corresponding to residues surrounding BCL-2, conjugated

to KLH.

**Formulation** Ascitic fluid containing 0.03% sodium azide.

### **Additional Information**

Gene ID 596

Other Names Apoptosis regulator Bcl-2, BCL2

**Dilution** IHC~~1/500 - 1/2000 FC~~1/200 - 1/400 ICC~~N/A E~~N/A

**Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions** BCL-2 Antibody is for research use only and not for use in diagnostic or

therapeutic procedures.

## **Protein Information**

Name BCL2

**Function** Suppresses apoptosis in a variety of cell systems including factor-dependent

lymphohematopoietic and neural cells (PubMed:<u>1508712</u>, PubMed:<u>8183370</u>). Regulates cell death by controlling the mitochondrial membrane permeability

(PubMed:<u>11368354</u>). Appears to function in a feedback loop system with caspases (PubMed:<u>11368354</u>). Inhibits caspase activity either by preventing the release of cytochrome c from the mitochondria and/or by binding to the apoptosis-activating factor (APAF-1) (PubMed:<u>11368354</u>). Also acts as an inhibitor of autophagy: interacts with BECN1 and AMBRA1 during non-starvation conditions and inhibits their autophagy function (PubMed:<u>18570871</u>, PubMed:<u>20889974</u>, PubMed:<u>21358617</u>). May attenuate inflammation by impairing NLRP1- inflammasome activation, hence CASP1 activation and IL1B release (PubMed:<u>17418785</u>).

**Cellular Location** 

Mitochondrion outer membrane; Single-pass membrane protein. Nucleus membrane; Single-pass membrane protein. Endoplasmic reticulum membrane; Single-pass membrane protein. Cytoplasm {ECO:0000250|UniProtKB:P10417}

**Tissue Location** 

Expressed in a variety of tissues.

#### References

1. J Biol Chem. 2010 Mar 26;285(13):9770-9. 2. Pharmacogenomics J. 2010 Feb 16. 3. J Int Med Res. 2009 Nov-Dec;37(6):1868-76.

## **Images**

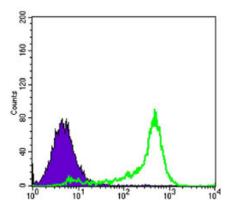


Figure 1: Flow cytometric analysis of 3T3L1 cells using BCL-2 mouse mAb (green) and negative control (purple).

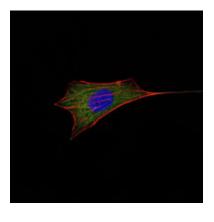


Figure 2: Immunofluorescence analysis of NIH/3T3 cells using BCL-2 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

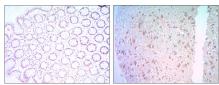


Figure 3: Immunohistochemical analysis of paraffin-embedded colon cancer tissues (left) and human brain tissues (right) using BCL-2 mouse mAb with DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.