

Datasheet for 200-401-Z43**BCL2 Antibody****Overview**

Description:	Anti-BCL2 (RABBIT) Antibody - 200-401-Z43
Item No.:	200-401-Z43
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse
Host Species:	Rabbit

Product Details

Background:	Apoptosis plays a major role in normal organism development, tissue homeostasis, and removal of damaged cells. Disruption of this process has been implicated in a variety of diseases such as cancer. Bcl-2 is the founding member of a family of over 20 proteins that are critical regulators of apoptosis. These can be divided into two classes: those that inhibit apoptosis and those that promote cell death. Bcl-2 is an inner mitochondrial membrane protein that inhibits apoptosis. It is thought to act by interacting with pro-apoptotic Bcl-2 family members such as Bak and Bad. Overexpression of Bcl-2 has been linked to human cancers such as B-cell lymphoma and prostate cancer.
Synonyms:	Bcl-2 Antibody, Bcl-2, PPP1R50, Apoptosis regulator Bcl-2
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	BCL2
Reactivity:	Human, Mouse
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-Bcl-2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a peptide corresponding to 15 amino acids near the N terminus of human Bcl-2. The immunogen is located within the first 50 amino acids of Bcl-2.

Purity/Specificity: Anti-Bcl-2 Antibody is affinity chromatography purified via peptide column. Cross reactivity with Bcl-2 from other sources has not been determined.

Relevant Links:

- [UniProtKB - P10415](#)
- [GeneID - 596](#)
- [NCBI - AAH27258](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-Bcl-2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 26 kDa in Western Blots of specific cell lysates and tissues. Western Blot tested in human and mouse samples; Immunohistochemistry in human and mouse samples; Immunofluorescence in human and mouse samples. Positive controls used A20 Cells, MCF-7 Cells, THP-1 Cells, and Human Kidney Tissue.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:10,000-1:40,000

IF: 10 µg/mL

IHC: 2 µg/mL

WB: 1 - 4 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

Stabilizer: None

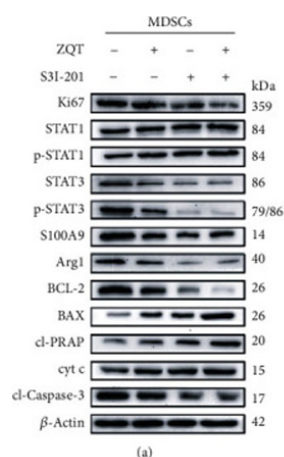
Shipping & Handling

Shipping Condition: Dry Ice

Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration: Expiration date is one (1) year from date of receipt.

Images

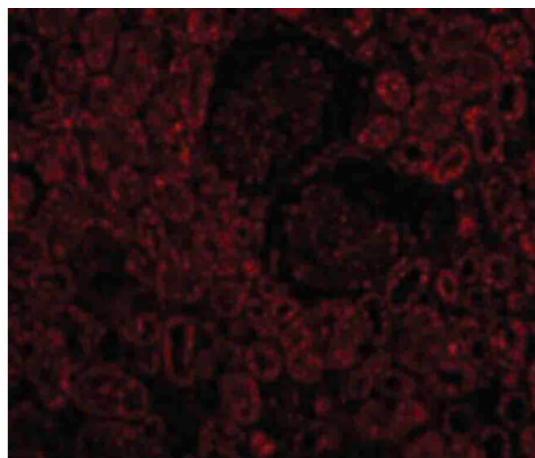


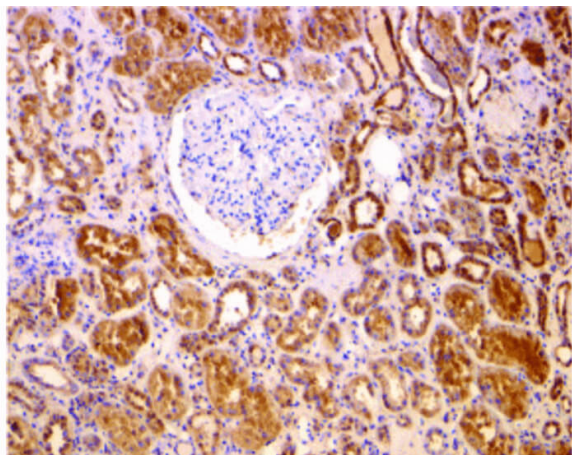
Western Blot

ZQT selectively induced G-MDSC apoptosis by activating the STAT3/S100A9/Bcl-2/caspase-3 signaling pathway. (a) MDSCs from the tumor tissue of tumor-bearing mice treated with normal saline, ZQT, STAT3 inhibitor (S3I-201), or ZQT combined with S3I-201 were isolated using the MojoSort Mouse Isolation Kit. The protein expression of Ki67, STAT1, p-STAT1, STAT3, p-STAT3, S100A9, Arg-1, Bcl-2, Bax, cl-PARP, cyt c, and cl-caspase-3 in MDSCs from both normal saline and ZQT-treated mice was confirmed by Western blotting. PMID: 33867859

Immunofluorescence Microscopy

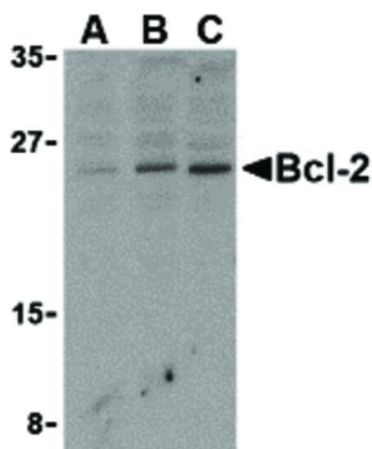
Immunofluorescence Microscopy of Bcl-2 antibody. Cell Type: human kidney cells. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: Bcl-2 antibody at 10 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Bcl-2 is located in the endoplasmic reticulum, cell membrane, mitochondria, mitochondrion outer membrane, and the nucleus. Staining: Bcl-2 as red fluorescent signal.





Immunohistochemistry

Immunohistochemistry of Bcl-2 antibody. Tissue: human kidney tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: Bcl-2 antibody at 2 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: Bcl-2 is located in the endoplasmic reticulum, cell membrane, mitochondria, mitochondrial outer membrane, and the nucleus. Staining: Bcl-2 is stained with hematoxylin purple nuclear counterstain.



Western Blot

Western Blot of Bcl-2 antibody in Daudi cell lysates. Lane A: Bcl-2 antibody at 1 µg/mL. Lane B: Bcl-2 antibody at 2 µg/mL. Lane C: Bcl-2 antibody at 4 µg/mL. Load: 35 µg per lane. Primary antibody: Bcl-2 antibody at designated concentrations for overnight at 4°C. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 26 kDa, 24 kDa for Bcl-2. Other band(s): Bcl-2 splice variants and isoforms.

References

- Xu ZH et al. Ze-Qi-Tang Formula Induces Granulocytic Myeloid-Derived Suppressor Cell Apoptosis via STAT3/S100A9/Bcl-2/Caspase-3 Signaling to Prolong the Survival of Mice with Orthotopic Lung Cancer. *Mediators Inflamm.* (2021)

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.