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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

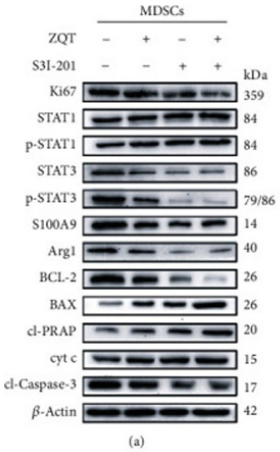
Physical State:	Liquid (sterile filtered)
Concentration:	1 mg/mL by UV absorbance at 280 nm
Buffer:	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
Preservative:	0.02% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

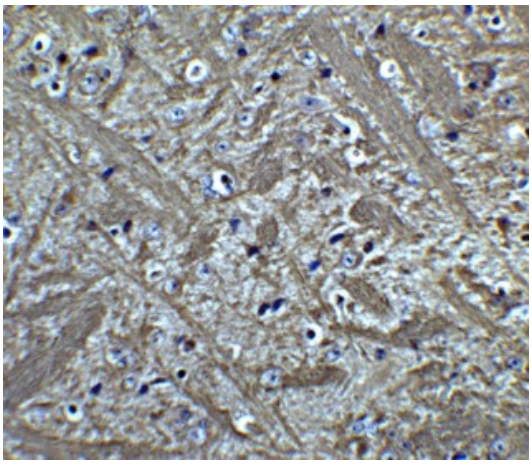
Shipping Condition:	Dry Ice

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.

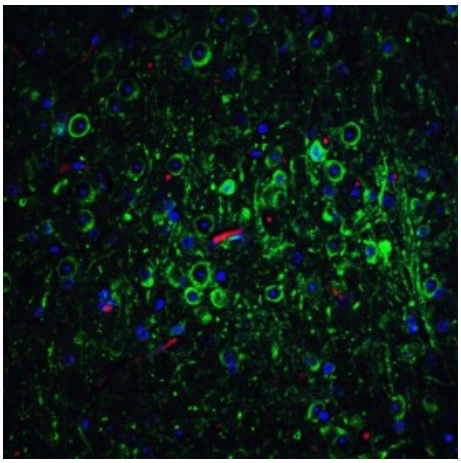
Images



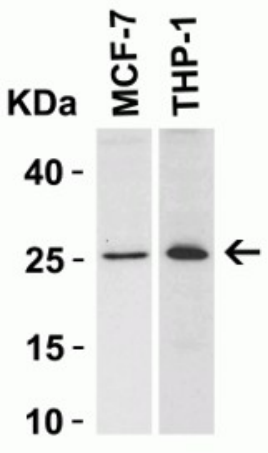
Western Blot
ZQT selectively induced G-MDSC apoptosis by activating the STAT3/S100A9/Bcl-2/caspase-3 signaling pathway. (a) MDSCs from the tumor tissue of tumor-bearing mice treated with normal saline, ZQT, STAT3 inhibitor (S3I-201), or ZQT combined with S3I-201 were isolated using the MojoSort Mouse 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



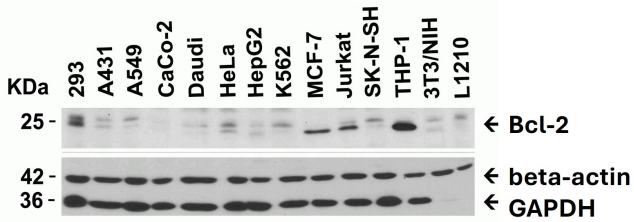
Immunohistochemistry
Immunohistochemistry Validation of Bcl-2. Immunohistochemical analysis of paraffin-embedded Mouse Brain Tissue using anti-Bcl-2 antibody at 5 µg/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



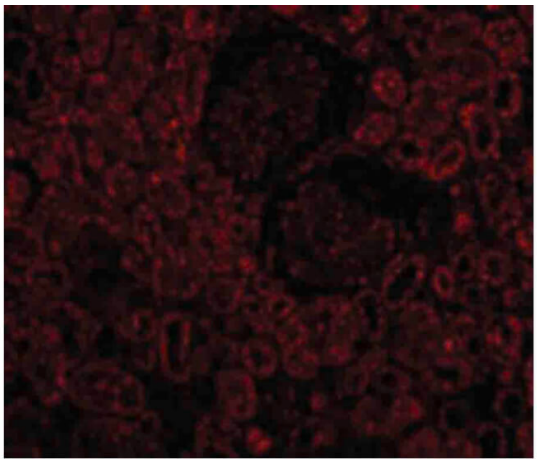
Immunofluorescence Microscopy
Immunofluorescence Validation of Bcl-2. Immunofluorescent analysis of 4% paraformaldehyde-fixed Mouse Brain Tissue labeling Bcl-2 at 20 µg/mL, followed by goat anti-rabbit IgG secondary antibody at 1/500 dilution (green).



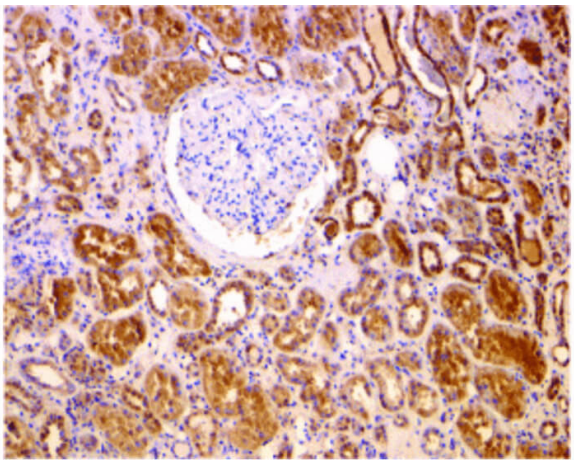
Western Blot
Western Blot Validation. Loading: 15 µg of human cell line lysates per lane. Antibodies: Bcl-2, (2 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



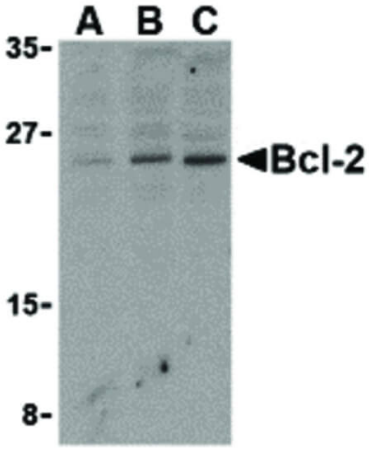
Western Blot
Western Blot Validation in BCL2. Loading: 15 µg of lysates per lane. Antibodies: Bcl-2, (2 µg/mL), beta-actin (1 µg/mL) and GAPDH (0.02 µg/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution.



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, mitochondrian 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, mitochondrian 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)

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