

# Rabbit Anti-Bcl-2 antibody

## SL0032R

Product Name:	Bcl-2
Chinese Name:	Bcl-2抗体
Alias:	Apoptosis regulator Bcl 2; Apoptosis regulator Bcl2; AW986256; B cell CLL/lymphoma 2; B cell leukemia/lymphoma 2; B cell lymphoma 2; Bcl 2; Bcl-2; Bcl2; BCL2 protein; C430015F12Rik; D630044D05Rik; D830018M01Rik; Leukemia/lymphoma, B-cell, 2; Oncogene B-cell leukemia 2; BCL2_HUMAN.
	Specific References(6) SL0032R has been referenced in 6 publications.
	[IF=3.33]Chen, Jie, et al. "Targeting SPARC by lentivirus-mediated RNA interference
	inhibits cervical cancer cell growth and metastasis." BMC cancer 12.1 (2012):
	464.WB;Human.
	PubMed:23050783
	[IF=3.33] Tian, Xiao Qiang, et al. "The protective effect of Hyperbaric oxygen and
	Ginkgo Biloba extract on Aβ25-35-induced oxidative stress and neuronal apoptosis in
文献引用	rats." Behavioural Brain Research (2012). WB;Rat.
Pub Med	PubMed:23266522
	[IF=2.27]He, X., et al. "Rapamycin inhibits acrolein-induced apoptosis by alleviating
	ROS-driven mitochondrial dysfunction in male germ cells." Cell Proliferation
	(2014).WB;Mouse.
	PubMed:24483236
	[IF=2.38]She, Yue, et al. "Aluminum Trichloride Disorders Bile Acid Secretion and
	Induces Hepatocyte Apoptosis in Rats." Cell Biochemistry and Biophysics (2015): 1-
	9.IHC-P;Rat.
	PubMed:25578489

	[IF=1.55] Yang, Jinjiang, Ying Lu, and Ai Guo. "Platelet-rich plasma protects rat
	chondrocytes from interleukin-1β-induced apoptosis." Molecular Medicine Reports 14.5
	(2016): 4075-4082. <b>WB;Rat</b> .
	(2010). 4073-4002. <b>WB, Kat</b> .
	PubMed:27665780
	[IF=3.13]Zhang, Wen-feng, et al. "Angelica polysaccharides inhibit the growth and
	promote the apoptosis of U251 glioma cells in vitro and in vivo." Phytomedicine
	(2017). <b>WB;Human</b> .
	PubMed:0
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Chicken, Dog, Pig, Cow, Horse, Rabbit, Guinea Pig,
•	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-
<b>1.</b> 1. 4.	Cyt=3ug/testIF=1:100-500 (Paraffin sections need antigen repair)
Applications:	not yet tested in other applications.
	optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	26kDa
Cellular localization:	The nucleuscytoplasmicThe cell membraneMitochondrion
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Bcl-2:101-160/236
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	The Bcl-2 gene was isolated at the chromosomal breakpoint of t(14;18)-bearing follicular B cell lymphomas(1,2).Bcl-2 blocks cell death following a variety of stimuli and confers a death-sparing effect to certain hematopoietic cell lines following growth factor withdrawal (3,5).Bcl-2 appears to function in several subcellular locations yet lacks any known motifs that would confer insight into its mechanism of action (6,7).A more recently identified protein,designated Bax p21(i.e., Bcl-associated X protein),has extensive amino acid homology with Bcl-2 and both homodimerizes and forms heterodimers with Bcl-2(8). Overexpression of Bax accelerates apoptotic death induced by cytokine deprivation in an IL-3 dependent cell line and Bax also counters the death repressor activty of Bcl-2(8).
	Function: Suppresses apoptosis in a variety of cell systems including factor-dependent lymphohematopoietic and neural cells. Regulates cell death by controlling the

mitochondrial membrane permeability. Appears to function in a feedback loop system with caspases. 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).

#### **Subunit:**

Forms homodimers, and heterodimers with BAX, BAD, BAK and Bcl-X(L). Heterodimerization with BAX requires intact BH1 and BH2 motifs, and is necessary for anti-apoptotic activity. Interacts with EI24 (By similarity). Also interacts with APAF1, BBC3, BCL2L1, BNIPL, MRPL41 and TP53BP2. Binding to FKBP8 seems to target BCL2 to the mitochondria and probably interferes with the binding of BCL2 to its targets. Interacts with BAG1 in an ATP-dependent manner. Interacts with RAF1 (the 'Ser-338' and 'Ser-339' phosphorylated form). Interacts (via the BH4 domain) with EGLN3; the interaction prevents the formation of the BAX-BCL2 complex and inhibits the anti-apoptotic activity of BCL2. Interacts with G0S2; this interaction also prevents the formation of the anti-apoptotic BAX-BCL2 complex.

#### **Subcellular Location:**

Mitochondrion outer membrane; Single-pass membrane protein. Nucleus membrane; Single-pass membrane protein. Endoplasmic reticulum membrane; Single-pass membrane protein.

### Tissue Specificity:

Expressed in a variety of tissues.

#### **Post-translational modifications:**

Phosphorylation/dephosphorylation on Ser-70 regulates anti-apoptotic activity. Growth factor-stimulated phosphorylation on Ser-70 by PKC is required for the anti-apoptosis activity and occurs during the G2/M phase of the cell cycle. In the absence of growth factors, BCL2 appears to be phosphorylated by other protein kinases such as ERKs and stress-activated kinases. Phosphorylated by MAPK8/JNK1 at Thr-69, Ser-70 and Ser-87, wich stimulates starvation-induced autophagy. Dephosphorylated by protein phosphatase 2A (PP2A).

Proteolytically cleaved by caspases during apoptosis. The cleaved protein, lacking the BH4 motif, has pro-apoptotic activity, causes the release of cytochrome c into the cytosol promoting further caspase activity.

Monoubiquitinated by PARK2, leading to increase its stability.

#### **DISEASE:**

Note=A chromosomal aberration involving BCL2 has been found in chronic lymphatic leukemia. Translocation t(14;18)(q32;q21) with immunoglobulin gene regions. BCL2 mutations found in non-Hodgkin lymphomas carrying the chromosomal translocation could be attributed to the Ig somatic hypermutation mechanism resulting in nucleotide transitions.

#### Similarity:

Belongs to the Bcl-2 family.

**SWISS:** 

P49950

Gene ID:

596

Database links:

Entrez Gene: 281020 Cow

Entrez Gene: 596 Human

Entrez Gene: 12043 Mouse

Entrez Gene: 24224 Rat

Omim: 151430 Human

SwissProt: O02718 Cow

SwissProt: P10415 Human

SwissProt: P10417 Mouse

SwissProt: P49950 Rat

Unigene: 150749 Human

Unigene: 257460 Mouse

Unigene: 9996 Rat

#### **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

## Bcl-2基因是指B-cell lymphoma

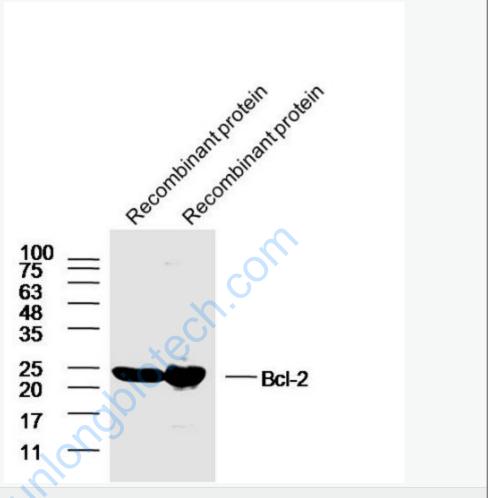
gene。人体滤泡B细胞淋巴瘤中过量表达的原癌基因。由于染色体t(14;18)易位,将Bcl-

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2基因置于免疫球蛋白重链的转录调控下,使其表达失控。在细胞系中其过量表达能延长细胞存活期而不诱导细胞增殖。它是哺乳动物中细胞调亡的抑制基因。参与Apoptosis的调控。Tumour中的Bcl-

2基因可提高侵润性瘤细胞的生存能力。主要用于滤胞型淋巴瘤、毛细管性白血病及Apoptosis等方面的研究。

	目前研究认为: Bcl- 2也是Apoptosis的一种抑制因子、参与Apoptosis调控,可以用于各种恶性Tumour的 Apoptosis的研究。
Picture:	Protein: Spleen(Mouse)lysate 30ug; Primary: Anti-Bcl-2(SL0032R) at 1:300; Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/10000 dilution Predicted band size: 26kD Observed band size: 26kD



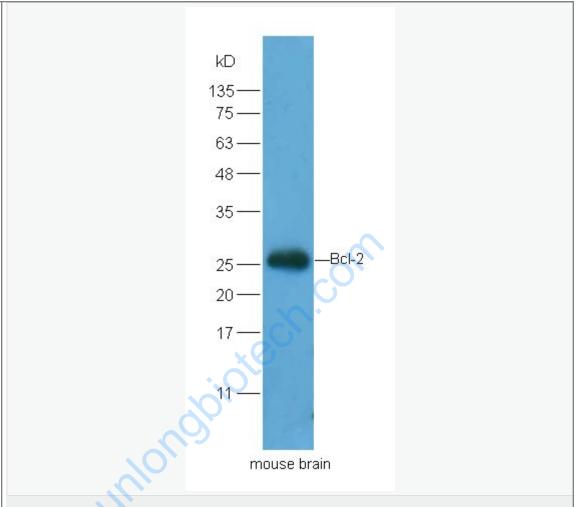
Protein: Recombinant protein lysate 100ng;

Primary: Anti-Bcl-2(SL0032R) at 1:200;

Secondary: HRP conjugated Goat Anti-Rabbit IgG(SL0032R) at 1: 5000;

Predicted band size: 26kD

Observed band size: 26kD



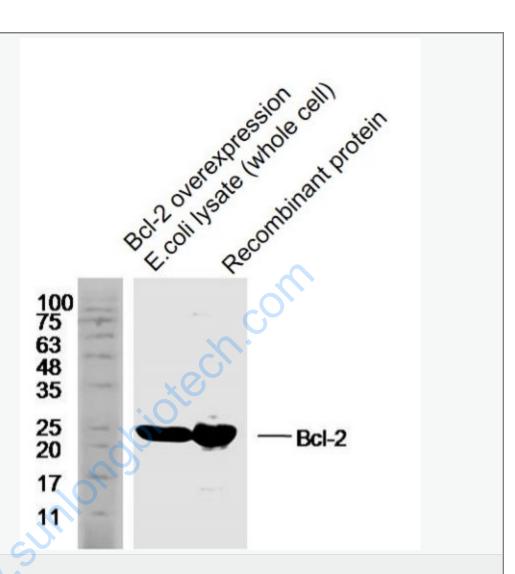
Protein: Brain(Mouse)lysate 30ug;

Primary: Anti-Bcl-2(SL0032R) at 1:200;

Secondary: HRP conjugated Goat Anti-Rabbit IgG(SL0032R) at 1: 5000;

Predicted band size: 26kD

Observed band size: 26kD



## Sample:

Bcl-2 overexpression E.coli lysate (whole cell) Lysate at 40 ug

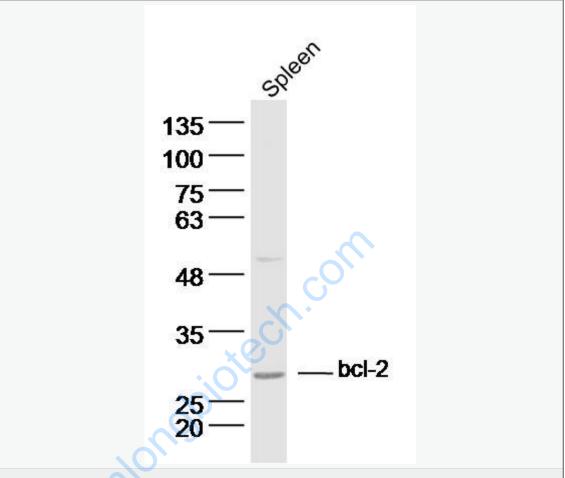
Recombinant protein Lysate at 40 ug

Primary: Anti-Bcl-2 (SL0032R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 26 kD

Observed band size: 25 kD



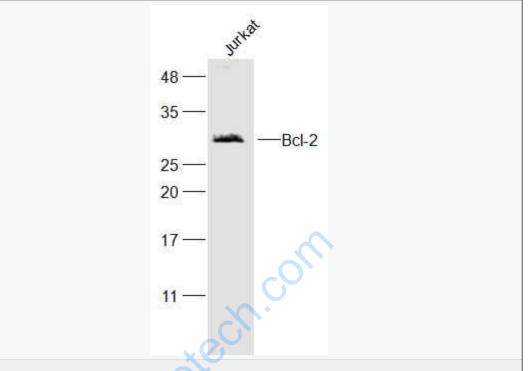
Sample:Spleen (Mouse) Lysate at 40 ug

Primary: Anti-Bcl-2 (SL0032R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 26 kD

Observed band size: 26 kD



Sample:

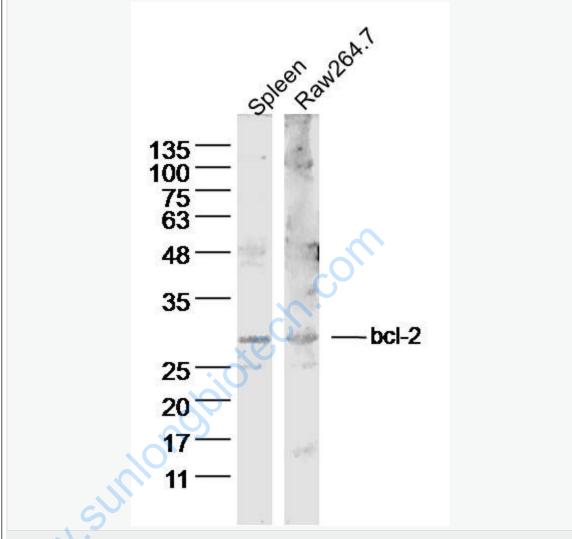
Jurkat(Human) Cell Lysate at 30 ug

Primary: Anti-Bcl-2 (SL0032R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 26 kD

Observed band size: 26 kD



# Sample:

Spleen (Mouse) Lysate at 40 ug

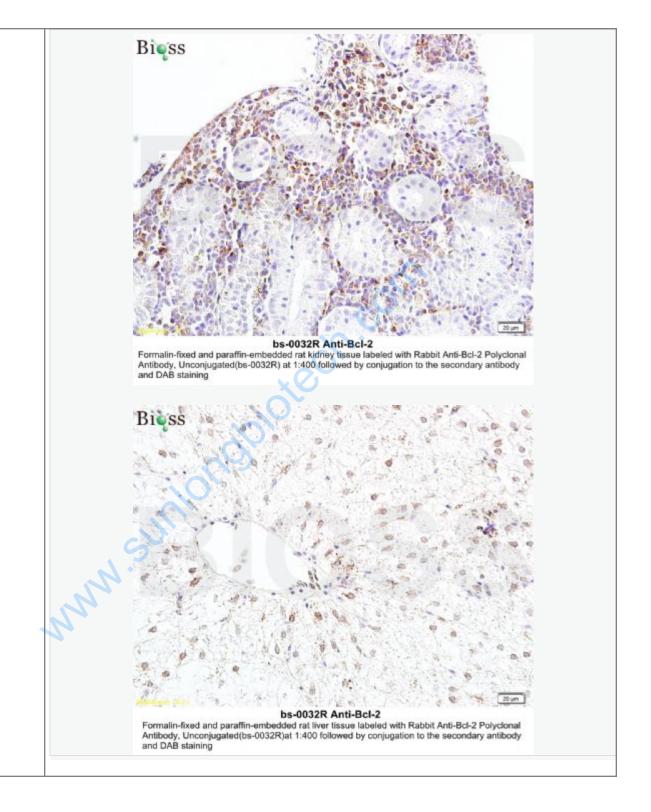
RAW264.7 Cell (Mouse) Lysate at 40 ug

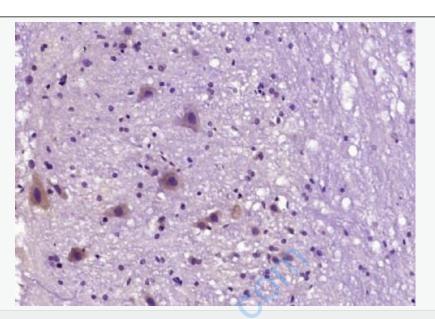
Primary: Anti-Bcl-2 (SL0032R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

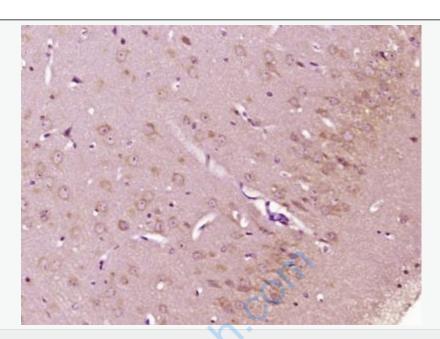
Predicted band size: 26 kD

Observed band size: 26 kD

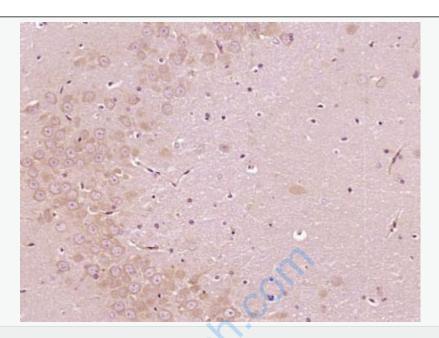




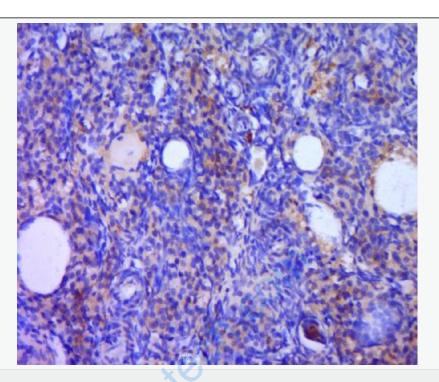
Paraformaldehyde-fixed, paraffin embedded (Rat spinal cord); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Bcl-2) Polyclonal Antibody, Unconjugated (SL0032R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



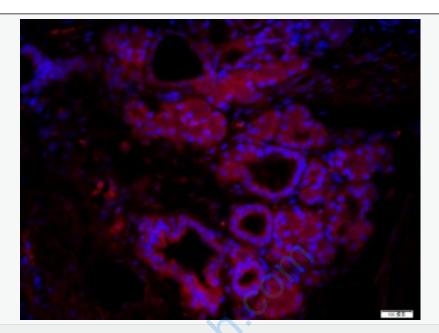
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Bcl-2) Polyclonal Antibody, Unconjugated (SL0032R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Bcl-2) Polyclonal Antibody, Unconjugated (SL0032R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (rat ovary tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Bcl-2) Polyclonal Antibody, Unconjugated (SL0032R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat thyroid gland); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (B cell lymphoma 2; Bcl-2) Polyclonal Antibody, Unconjugated (SL0032R) at 1:200 overnight at 4°C, followed by a conjugated secondary antibody (SL0032R) for 90 minutes and DAPI for nuclei staining.