

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.

Research Area Cell biology Signal transduction Apoptosis Cell type markers TumourCell biologyMaker The new supersedes the old Mitochondrion

Immunogen Species Rabbit

Clonality Polyclonal

React Species Human,Mouse,Rat(predicted:Chicken)
WB=1:1000-5000,IHC-P=1:200-500,IHC-F=1:200-500,IF=1:200-500,ELISA=1:5000-10000

Applications (Paraffin sections need antigen repair)
not yet tested in other applications.
optimal dilutions/concentrations should be determined by the end user.

Theoretical molecular weight 26kDa

Detection molecular weight 26 kDa

Cellular localization The nucleus cytoplasmic The cell membrane Mitochondrion

Form Liquid

Concentration 1mg/ml

immunogen KLH conjugated synthetic peptide derived from human Bcl-2: 101-160/236

Lsotype IgG

Purification affinity purified by Protein A

Buffer Solution Human,Mouse,Rat(predicted:Chicken)1M TBS(pH7.4) with 1% BSA,
Human,Mouse,Rat(predicted:Chicken)3% Proclin300 and 50% Glycerol.



Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed BCL2 is 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. Two transcript variants (alpha and beta) produced by alternate splicing, differ in their C-terminal ends. BCL2 suppresses apoptosis in a variety of cell systems including factor-dependent lymphohematopoietic and neural cells. It regulates cell death by controlling the mitochondrial membrane permeability. It appears to function in a feedback loop system with caspases. BCL2 inhibits caspase activity either by preventing the release of cytochrome c from the mitochondria and/or by binding to the apoptosis-activating factor (APAF1). It can form homodimers, and heterodimers with BAX, BAD, BAK and BclX(L). Heterodimerization with BAX requires intact BH1 and BH2 domains, and is necessary for anti-apoptotic activity. Also interacts with APAF1, RAF1, TP53BP2, BBC3, BCL2L1 and BNIPL.
Product Detail	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:

P10415

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

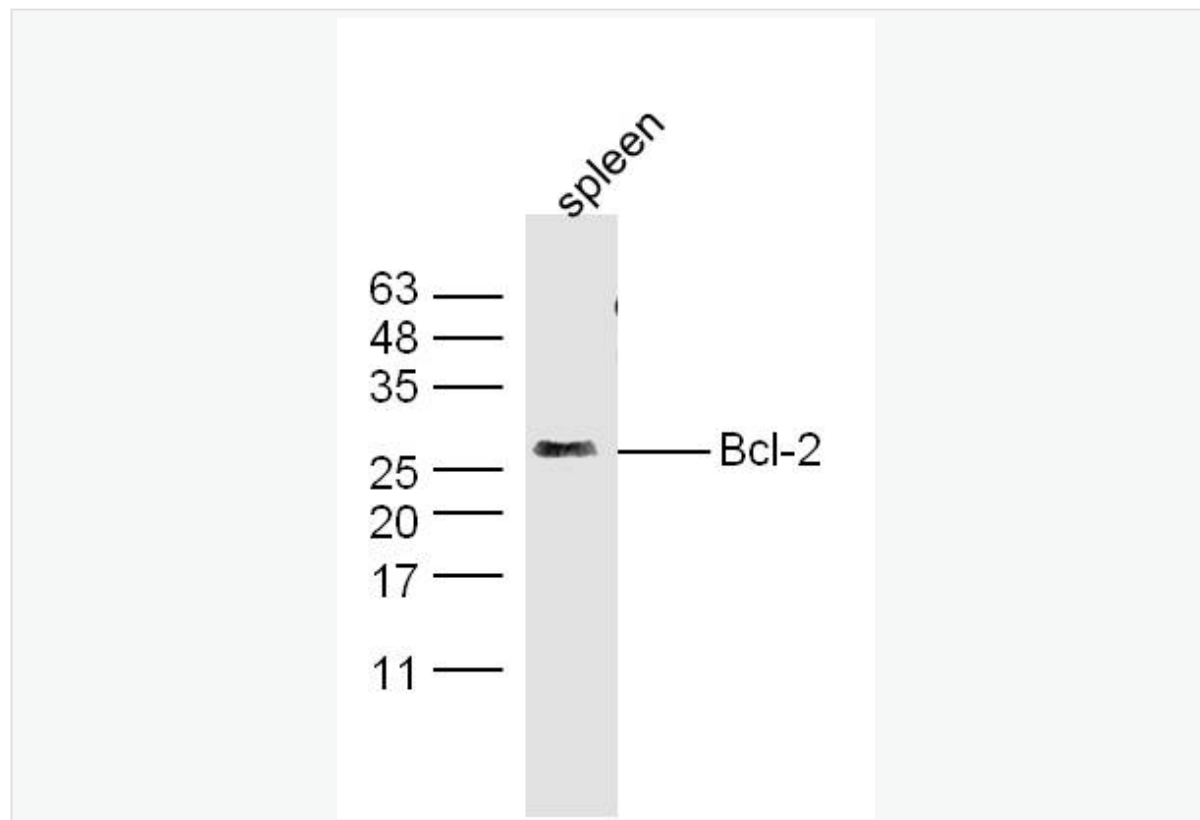
[Unigene: 257460](#) Mouse

[Unigene: 9996](#) Rat

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-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 基因可提高浸润性瘤细胞的生存能力。主要用于滤胞型淋巴瘤、毛细血管性白血病及 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。

Product
Picture



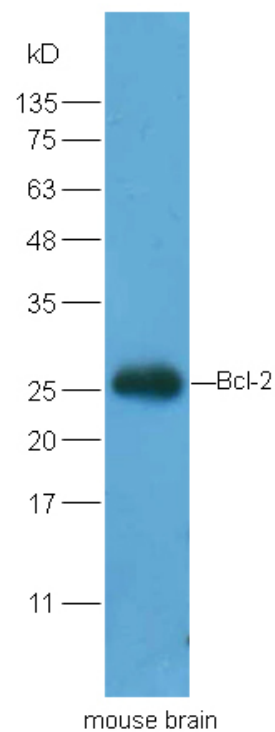
Protein: Spleen(Mouse)lysate 30ug;

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



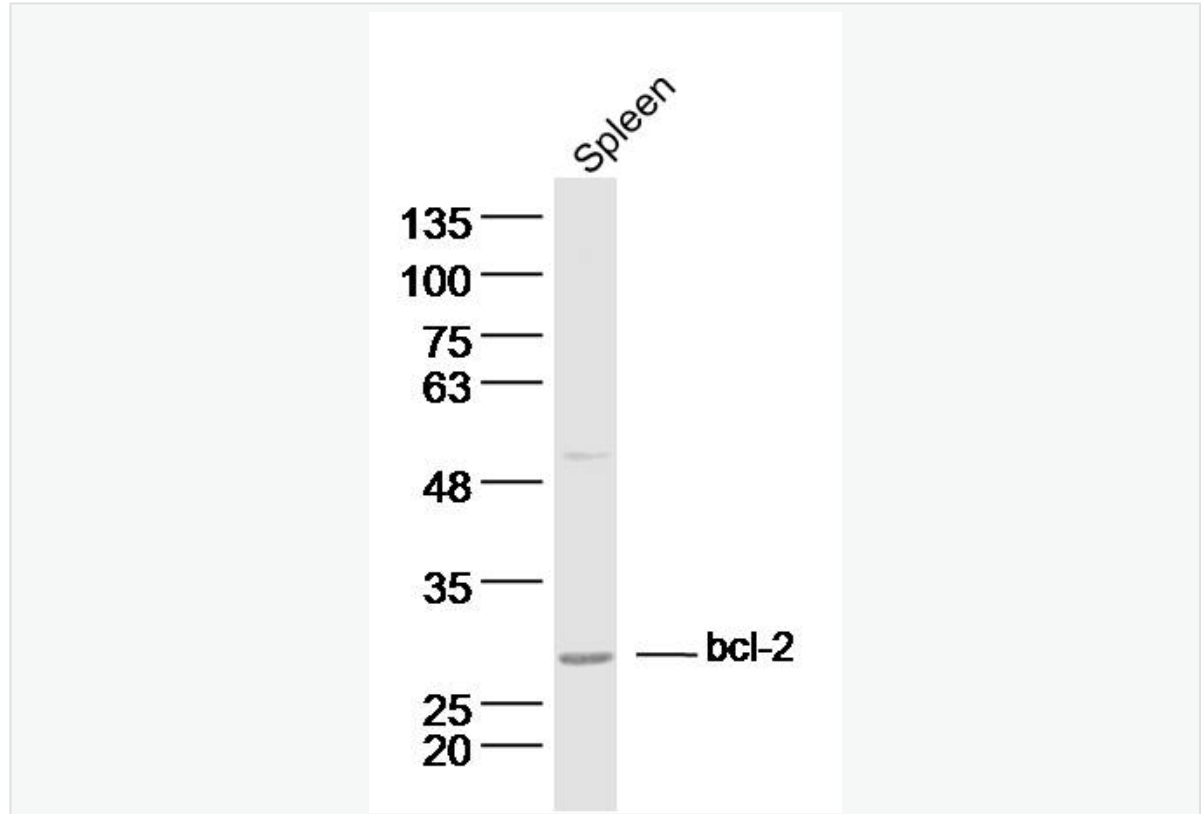
Protein: Brain(Mouse)lysate 30ug;

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

Secondary: HRP conjugated Goat Anti-Rabbit IgG(SL0295G-HRP) at 1: 5000;

Predicted band size : 26kD

Observed band size : 26kD



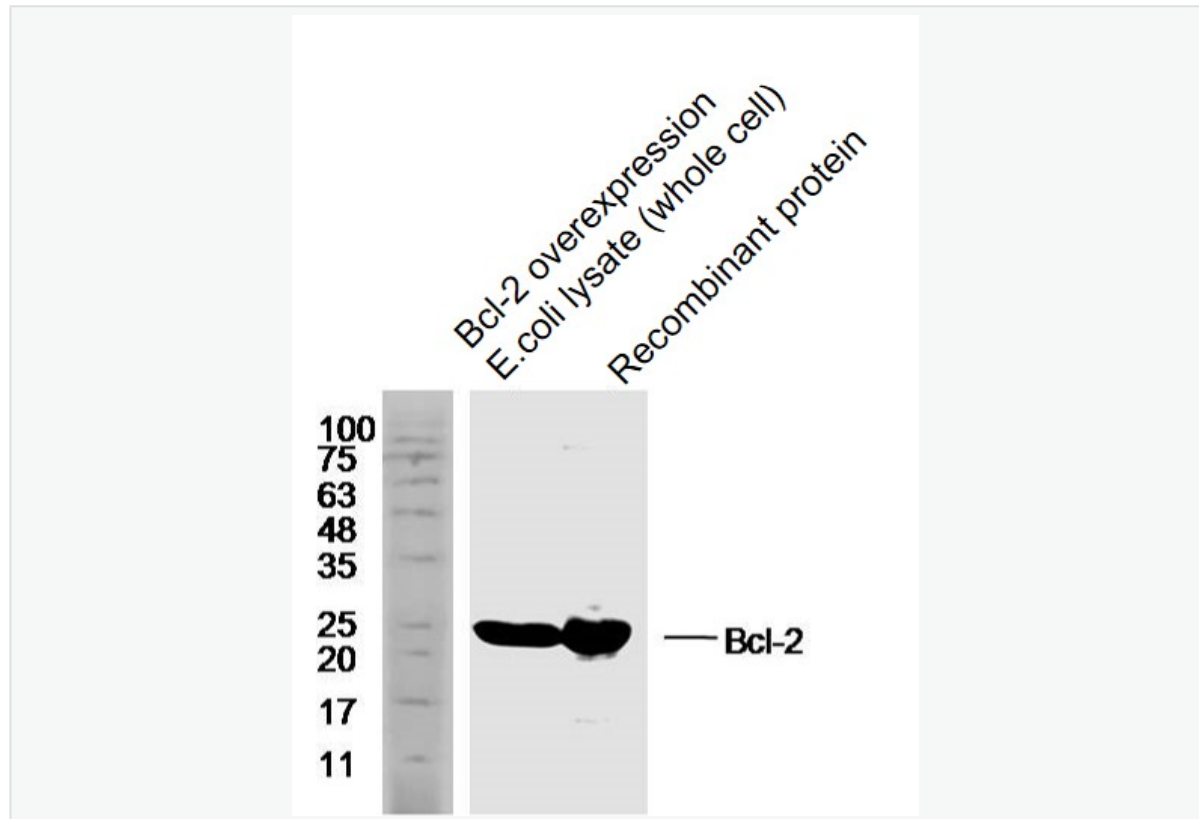
Sample:Spleen (Mouse) Lysate at 40 ug

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:

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

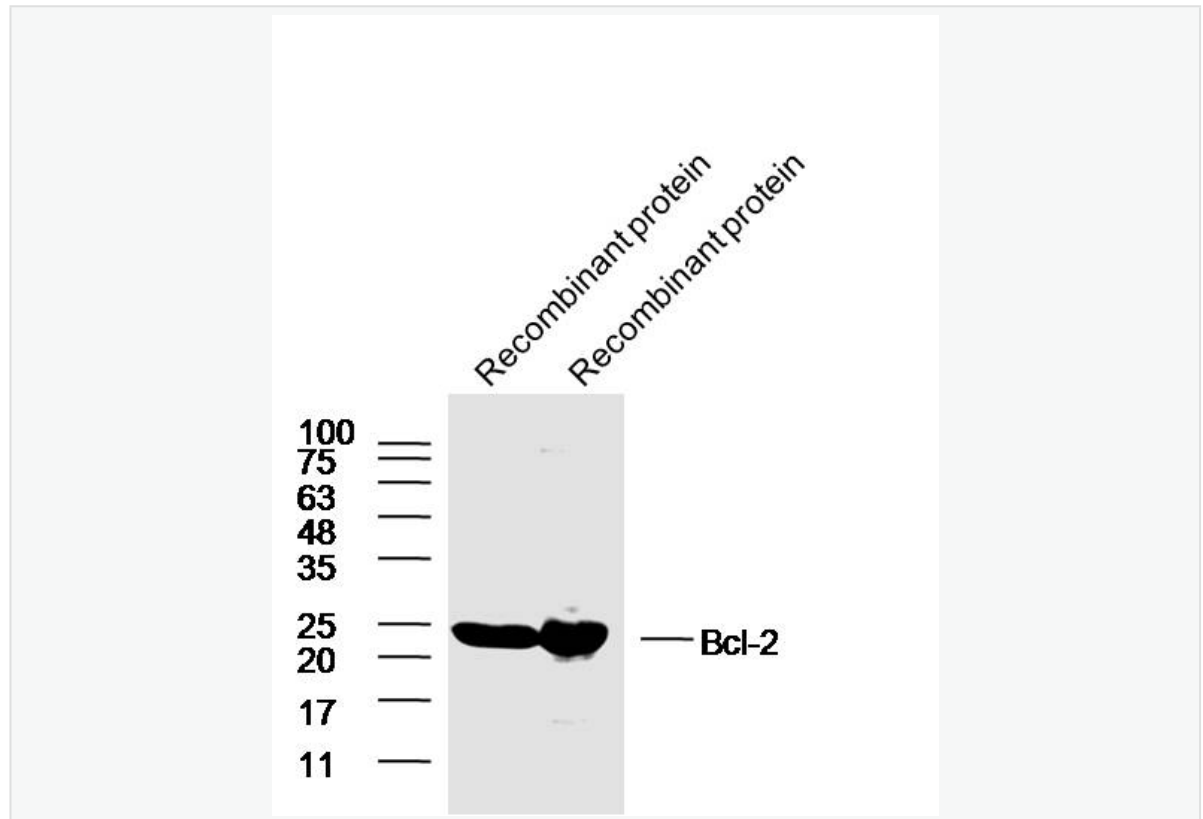
Recombinant protein Lysate at 40 ug

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



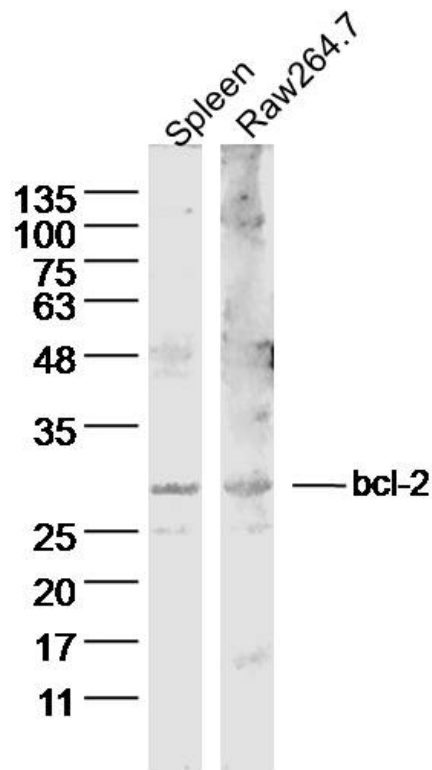
Protein: Recombinant protein lysate 100ng;

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

Secondary: HRP conjugated Goat Anti-Rabbit IgG(SL0295G-HRP) at 1: 5000;

Predicted band size : 26kD

Observed band size : 26kD



Sample:

Spleen (Mouse) Lysate at 40 ug

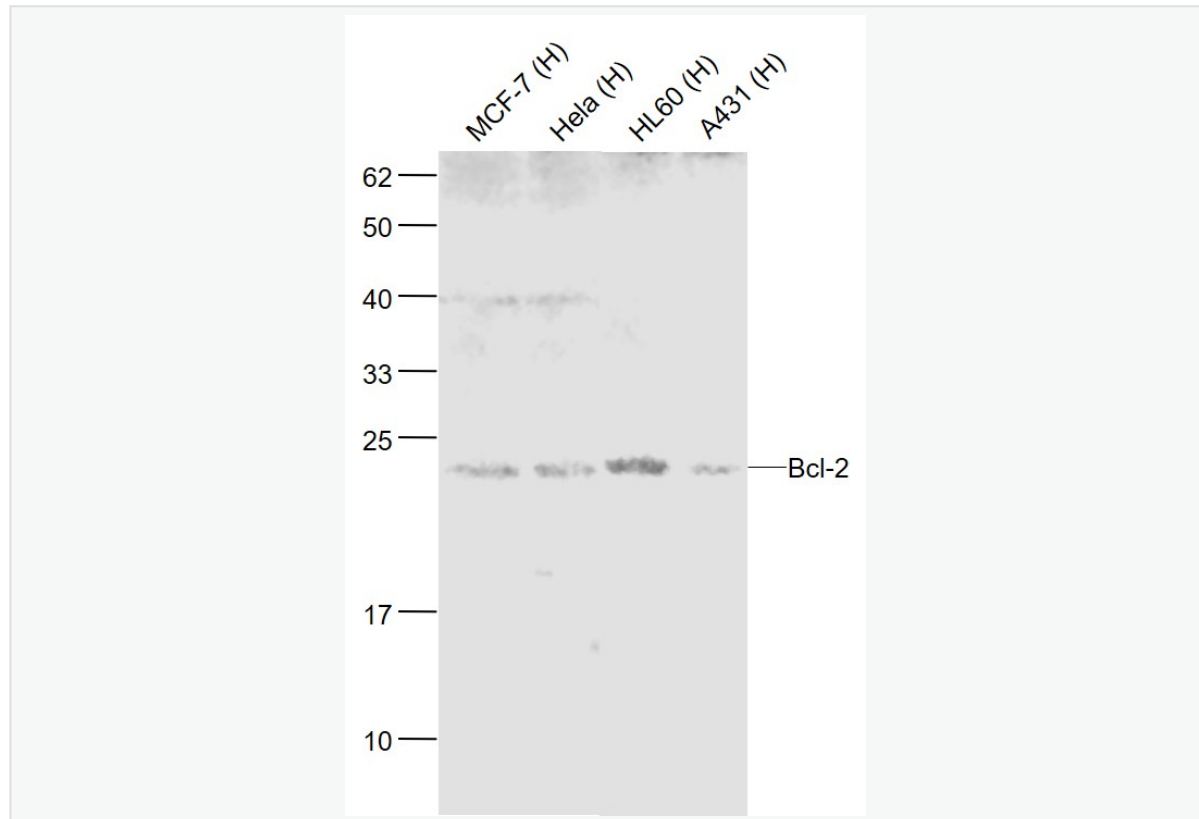
RAW264.7 Cell (Mouse) Lysate at 40 ug

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



Sample:

MCF-7 (Human) Cell Lysate at 30 ug

HeLa (Human) Cell Lysate at 30 ug

HL60 (Human) Cell Lysate at 30 ug

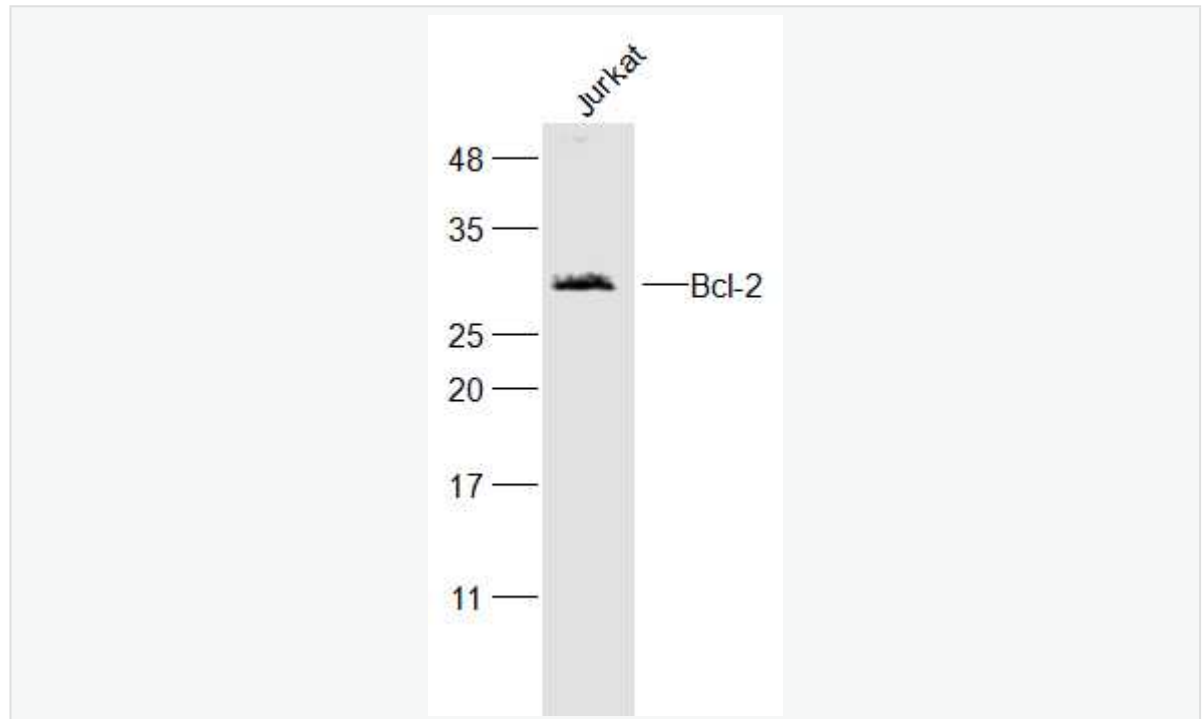
A431 (Human) Cell Lysate at 30 ug

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: 23 kD



Sample:

Jurkat(Human) Cell Lysate at 30 ug

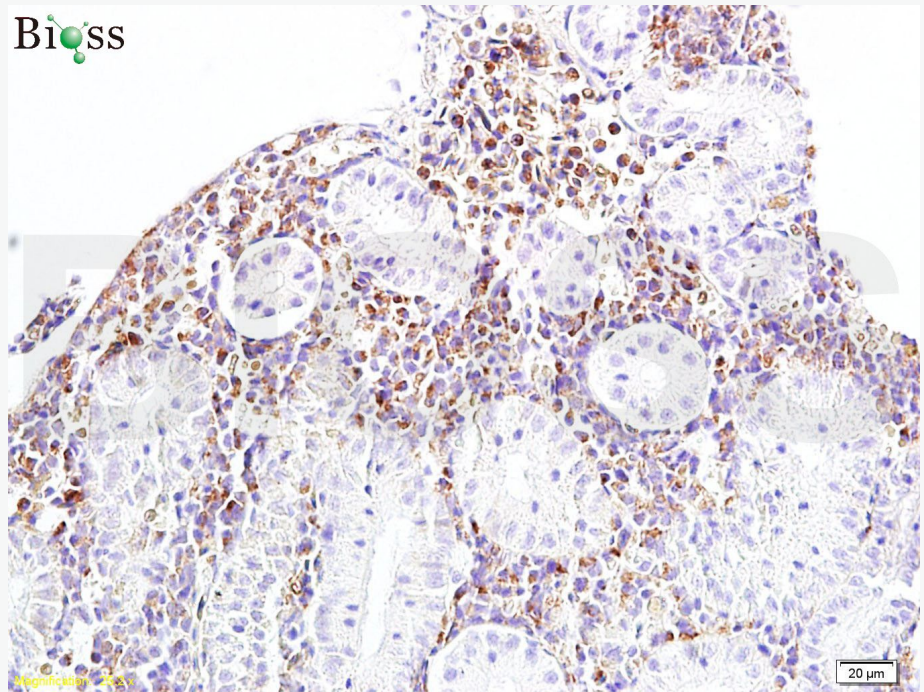
Primary: Anti-Bcl-2 (SL0032R) at 1/300 dilution

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

Predicted band size: 26 kD

Observed band size: 26 kD

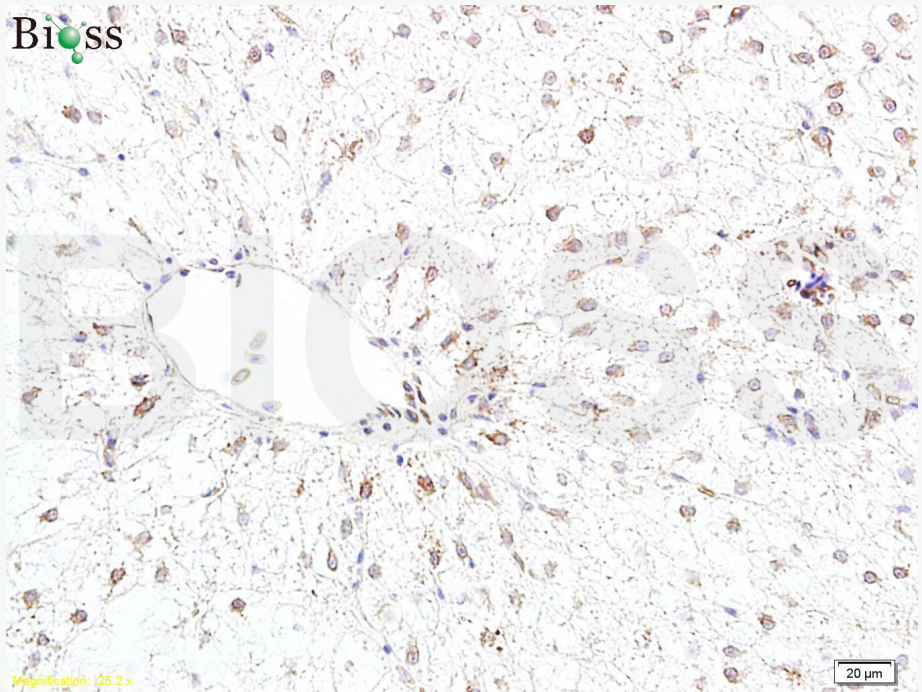
Bi^oss



bs-0032R Anti-Bcl-2

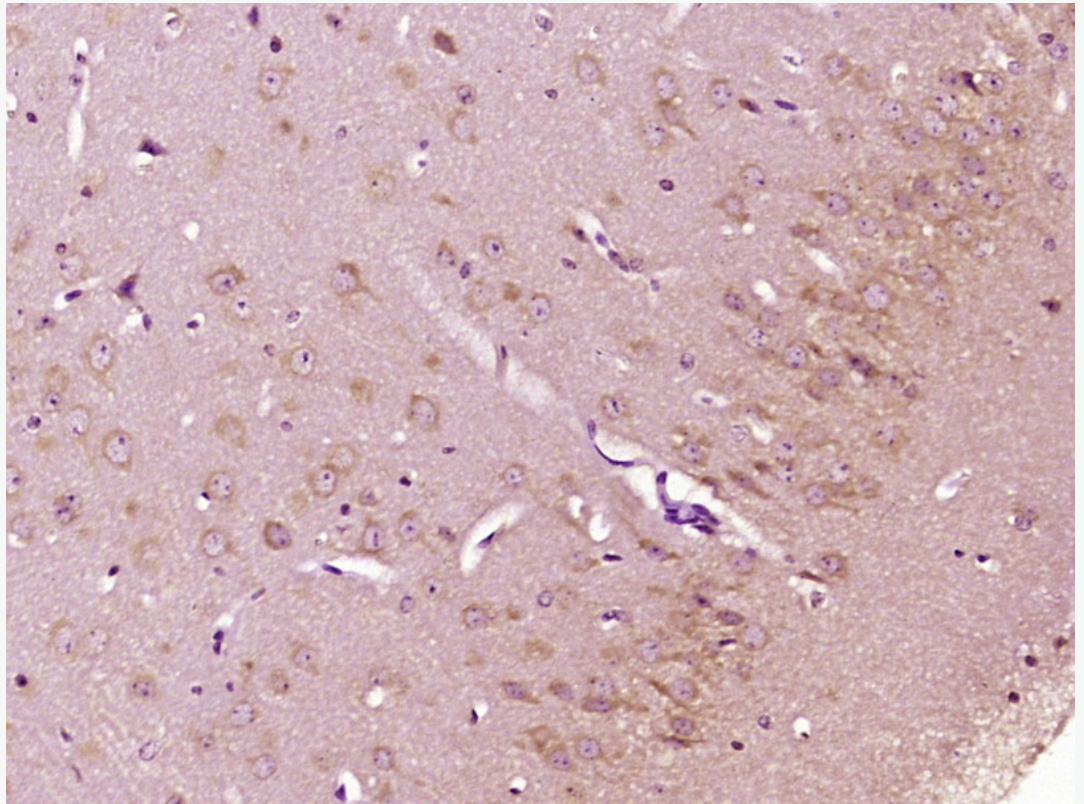
Formalin-fixed and paraffin-embedded rat kidney tissue labeled with Rabbit Anti-Bcl-2 Polyclonal Antibody, Unconjugated(bs-0032R) at 1:400 followed by conjugation to the secondary antibody and DAB staining

Bi^oss

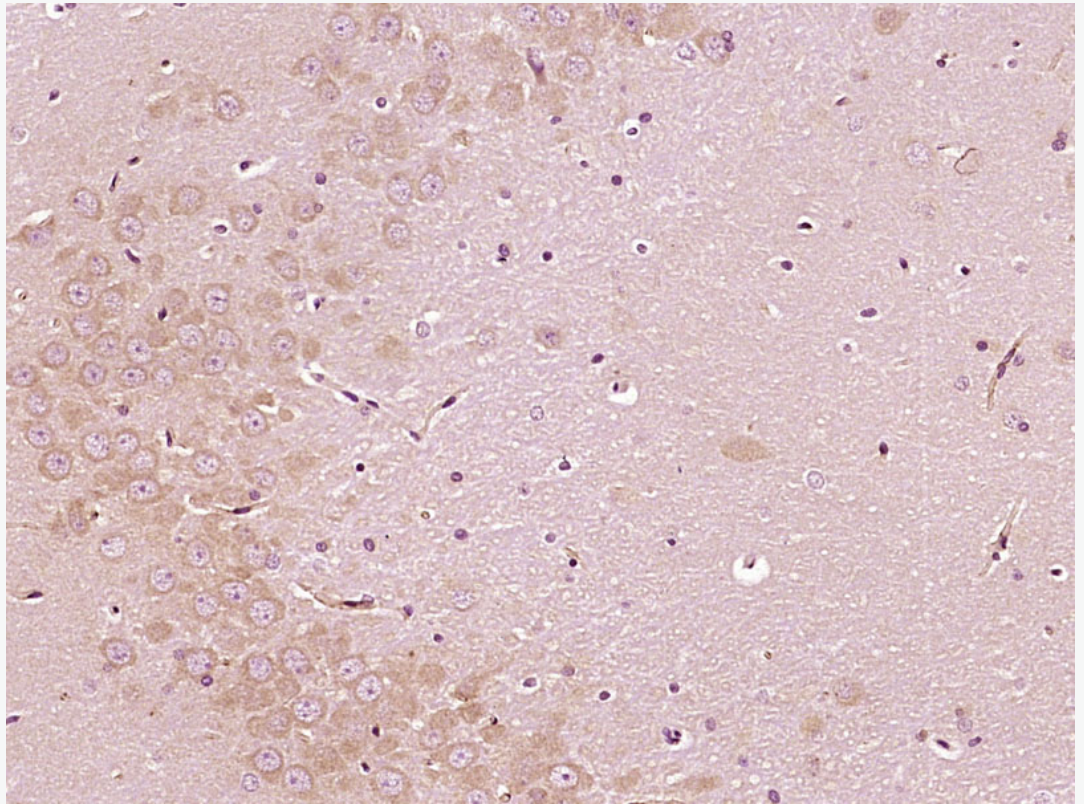


bs-0032R Anti-Bcl-2

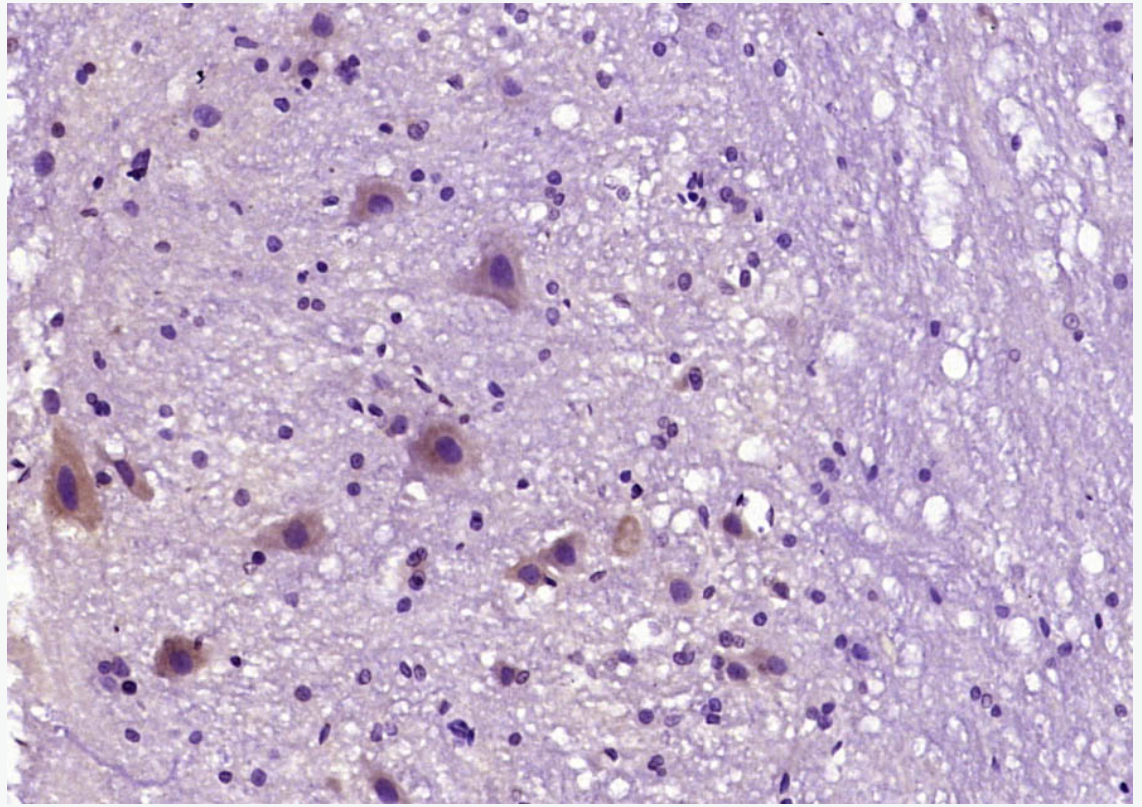
Formalin-fixed and paraffin-embedded rat liver tissue labeled with Rabbit Anti-Bcl-2 Polyclonal Antibody, Unconjugated(bs-0032R)at 1:400 followed by conjugation to the secondary antibody and DAB staining



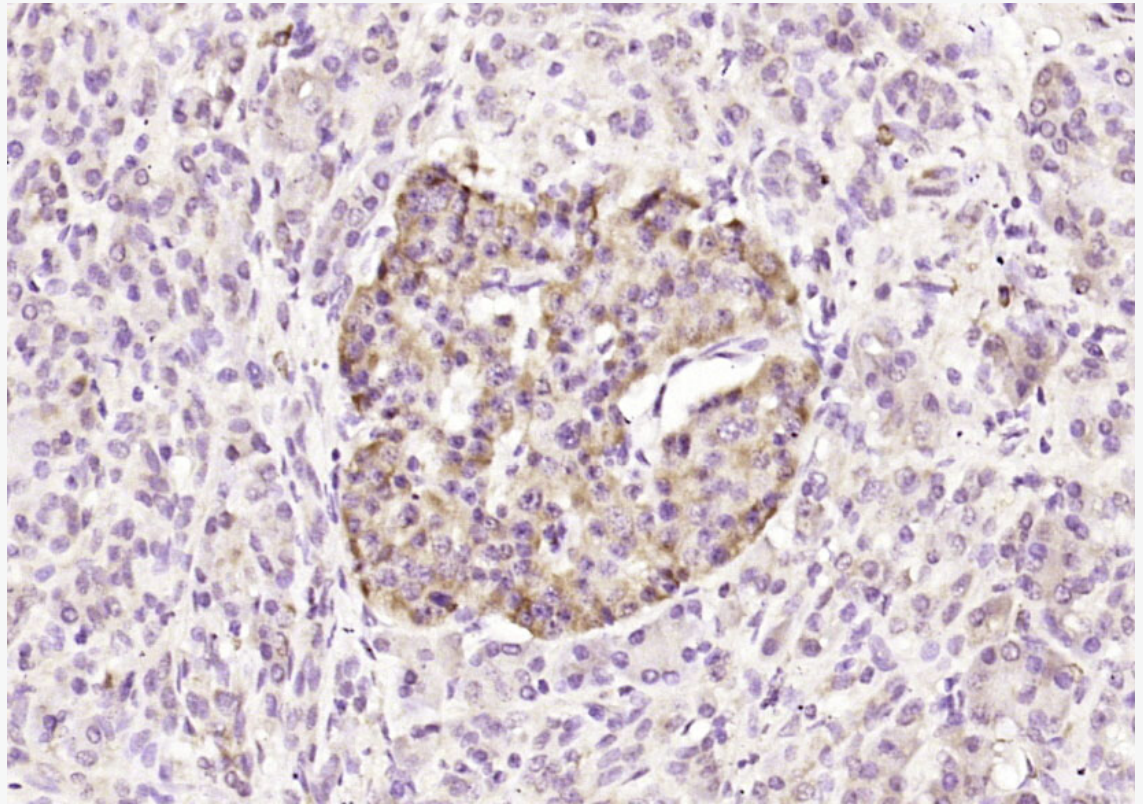
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Bcl-2) Polyclonal Antibody,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



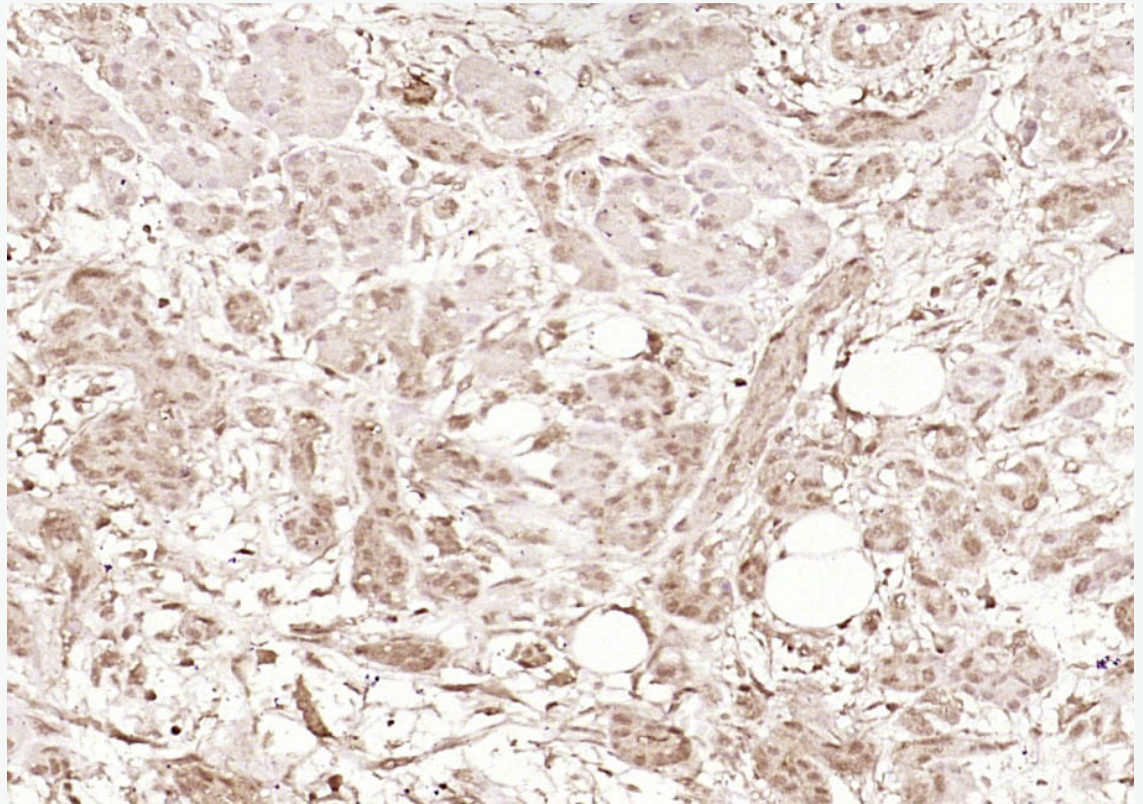
Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Bcl-2) Polyclonal Antibody,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



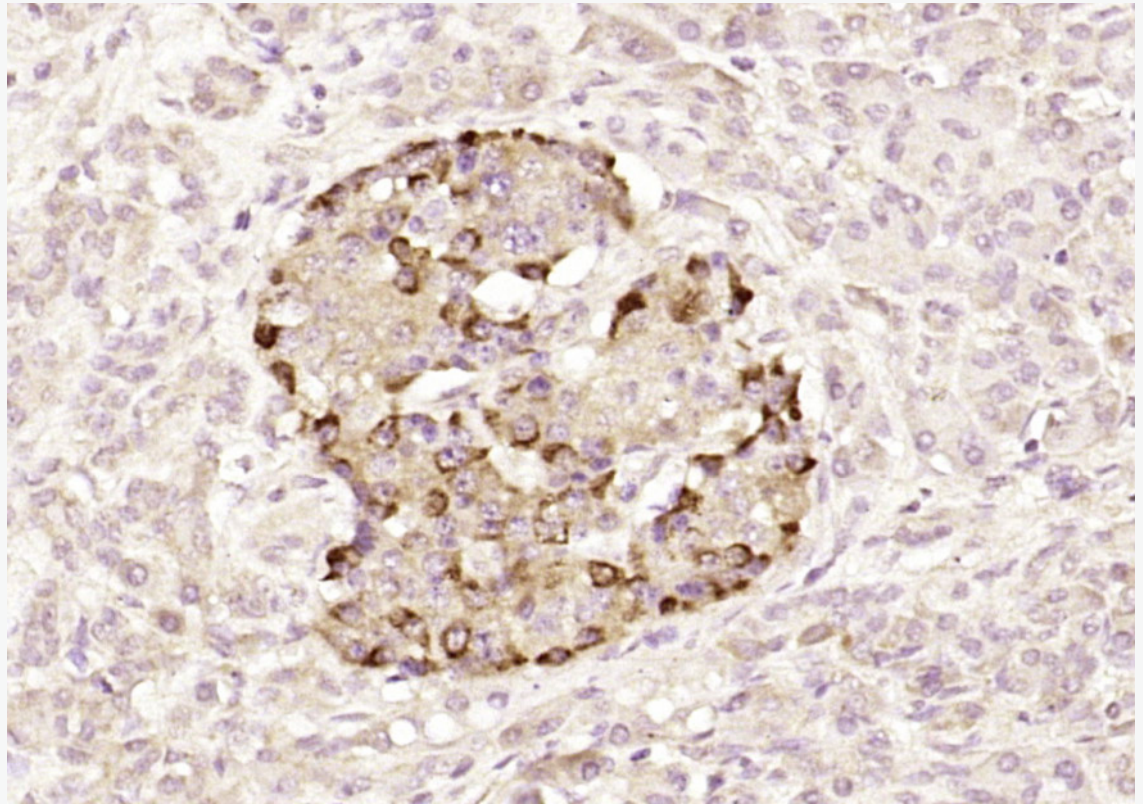
Paraformaldehyde-fixed, paraffin embedded (Rat spinal cord); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Bcl-2) Polyclonal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



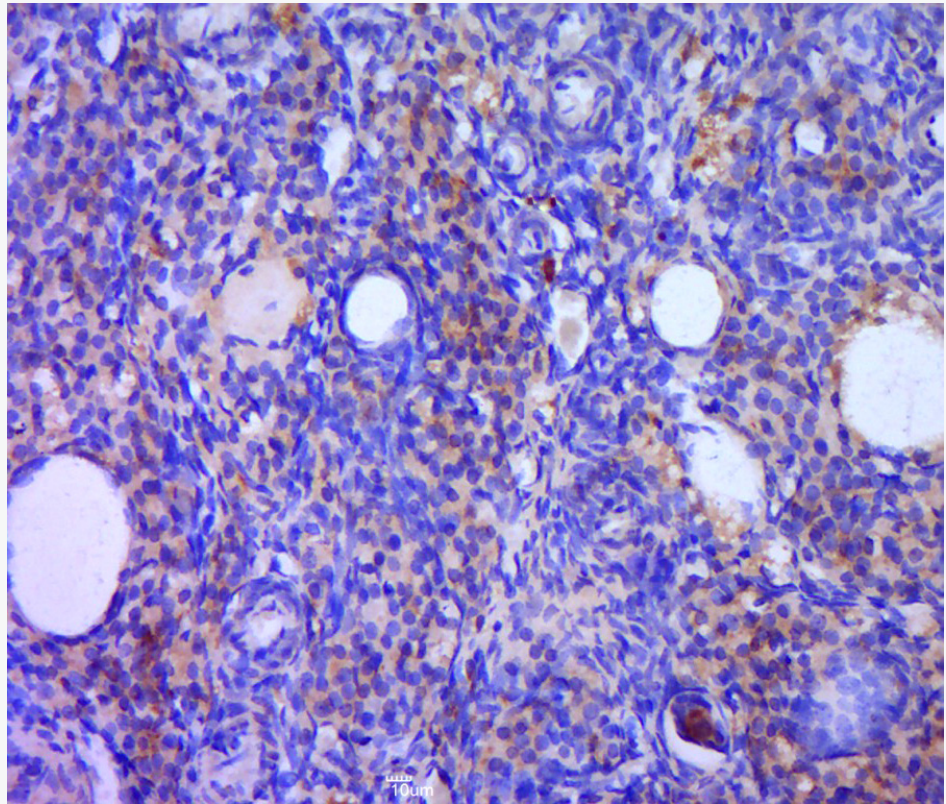
Paraformaldehyde-fixed, paraffin embedded (human pancreatic cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Bcl-2) Polyclonal Antibody, Unconjugated (SL0032R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



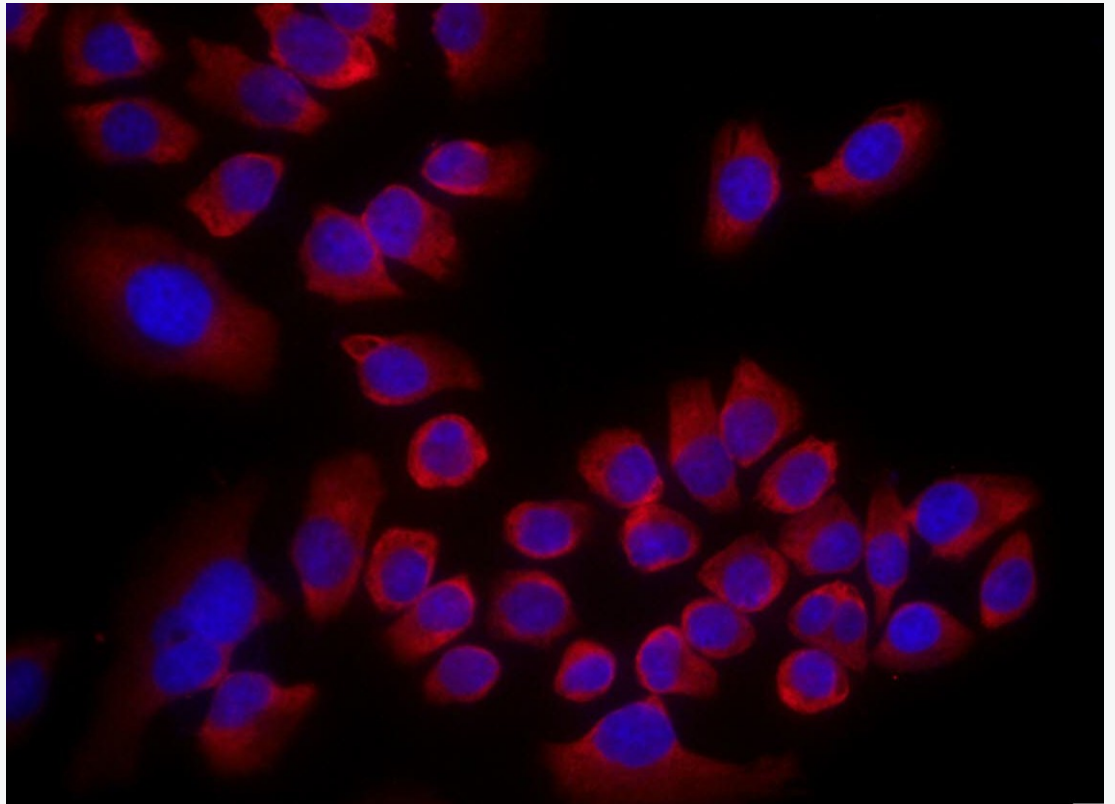
Paraformaldehyde-fixed, paraffin embedded (human pancreatic cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Bcl-2) Polyclonal Antibody, Unconjugated (SL0032R) at 1:2000 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human pancreatic cancer); 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 1:200 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.



Tissue/cell: MCF-7 cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum, C-0005) at 37°C for 20 min; Antibody incubation with (Bcl-2) Polyclonal Antibody, Unconjugated (SL0032R) 1:50, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody (SL0295G-Cy3) at 37°C for 90 minutes, DAPI (blu