



Rabbit Anti-phospho-Bcl-xL (Thr47) antibody

SL12579R

Product Name:	phospho-Bcl-xL (Thr47)
Chinese Name:	磷酸化Bcl-xL蛋白抗体
Alias:	BCL2L1 (phospho T47); BCL2L1 (phospho Thr47); p-BCL2L1 (phospho T47); p-BCL2L1 (Thr47); p-BCL2L1(Thr115); Apoptosis regulator Bcl X; BclX; Bcl-X; Bcl 2 like 1; Bcl 2 like 1 protein; Bcl xL; BCL X/L; BCL XL/S; Bcl xS; Bcl2 like1; BCL2-related gene; BCL2-related protein, long isoform, included; BCLXL, included; BCL2-related protein, short isoform, included; BCLXS, included; BCL2L; BCL2L1; Bclx; DKFZp781P2092; MGC113803; MGC99998; B2CL1 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Cow,Horse,Sheep,Guinea Pig,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) 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:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from human BCL2L1 around the phosphorylation site of Thr47:E(p-T)PS
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

The protein encoded by this gene belongs to the BCL-2 protein family. BCL-2 family members form hetero- or homodimers and act as anti- or pro-apoptotic regulators that are involved in a wide variety of cellular activities. The proteins encoded by this gene are located at the outer mitochondrial membrane, and have been shown to regulate outer mitochondrial membrane channel (VDAC) opening. VDAC regulates mitochondrial membrane potential, and thus controls the production of reactive oxygen species and release of cytochrome C by mitochondria, both of which are the potent inducers of cell apoptosis. Two alternatively spliced transcript variants, which encode distinct isoforms, have been reported. The longer isoform acts as an apoptotic inhibitor and the shorter form acts as an apoptotic activator. [provided by RefSeq, Jul 2008].

Function:

Potent inhibitor of cell death. Inhibits activation of caspases (By similarity). Appears to regulate cell death by blocking the voltage-dependent anion channel (VDAC) by binding to it and preventing the release of the caspase activator, CYC1, from the mitochondrial membrane.

Isoform Bcl-X(S) promotes apoptosis.

Subunit:

Homodimer. Isoform Bcl-X(L) forms heterodimers with BAX, BAK or BCL2.

Heterodimerization with BAX does not seem to be required for anti-apoptotic activity.

Interacts with BCL2L11. Interacts with DMN1L; the interaction stimulates the GTPase activity of DMN1L in synapses and increases the number of axonal mitochondria and the size and number of synaptic vesicle clusters. Interacts with BAD and BBC3.

Interacts (isoform Bcl-X(L)) with SIVA1 (isoform 1); the interaction inhibits the anti-apoptotic activity. Interacts with BECN1 and PGAM5. Interacts (isoform Bcl-X(L)) with BAX (isoform Sigma). Isoform Bcl-X(L) interacts with IKZF3. Interacts with HEBP2.

Subcellular Location:

Mitochondrion membrane; Single-pass membrane protein. Nucleus membrane; Single-pass membrane protein; Cytoplasmic side. Cytoplasm, cytoskeleton, centrosome.

Note=Mitochondrial membranes and perinuclear envelope. Localizes to the centrosome when phosphorylated at Ser-49.

Tissue Specificity:

Bcl-X(S) is expressed at high levels in cells that undergo a high rate of turnover, such as developing lymphocytes. In contrast, Bcl-X(L) is found in tissues containing long-lived postmitotic cells, such as adult brain.

Post-translational modifications:

Proteolytically cleaved by caspases during apoptosis. The cleaved protein, lacking the BH4 motif, has pro-apoptotic activity.

Phosphorylated on Ser-62 by CDK1. This phosphorylation is partial in normal mitotic cells, but complete in G2-arrested cells upon DNA-damage, thus promoting subsequent apoptosis probably by triggering caspases-mediated proteolysis. Phosphorylated by PLK3, leading to regulate the G2 checkpoint and progression to cytokinesis during

Product Detail:

mitosis. Phosphorylation at Ser-49 appears during the S phase and G2, disappears rapidly in early mitosis during prometaphase, metaphase and early anaphase, and re-appears during telophase and cytokinesis.

Similarity:

Belongs to the Bcl-2 family.

SWISS:

Q07817

Gene ID:

598

Database links:

[Entrez Gene: 598](#)Human

[Entrez Gene: 12048](#)Mouse

[Entrez Gene: 24888](#)Rat

[Olim: 600039](#)Human

[SwissProt: Q07817](#)Human

[SwissProt: Q64373](#)Mouse

[SwissProt: P53563](#)Rat

[Unigene: 516966](#)Human

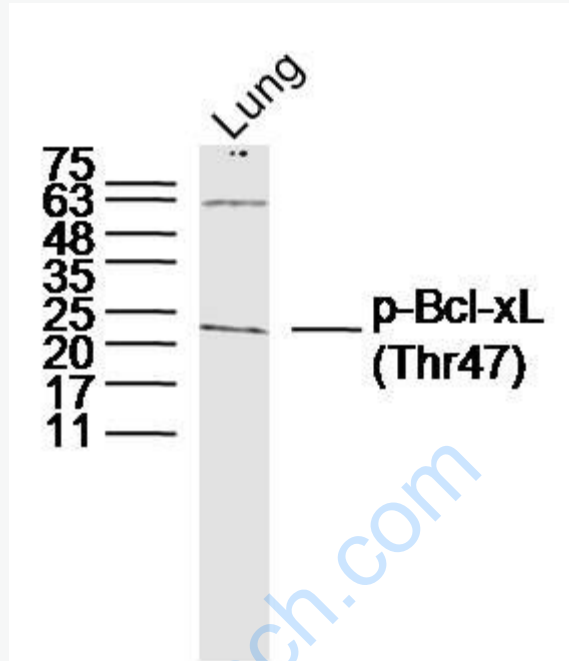
[Unigene: 238213](#)Mouse

[Unigene: 10323](#)Rat

Important Note:

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

Picture:



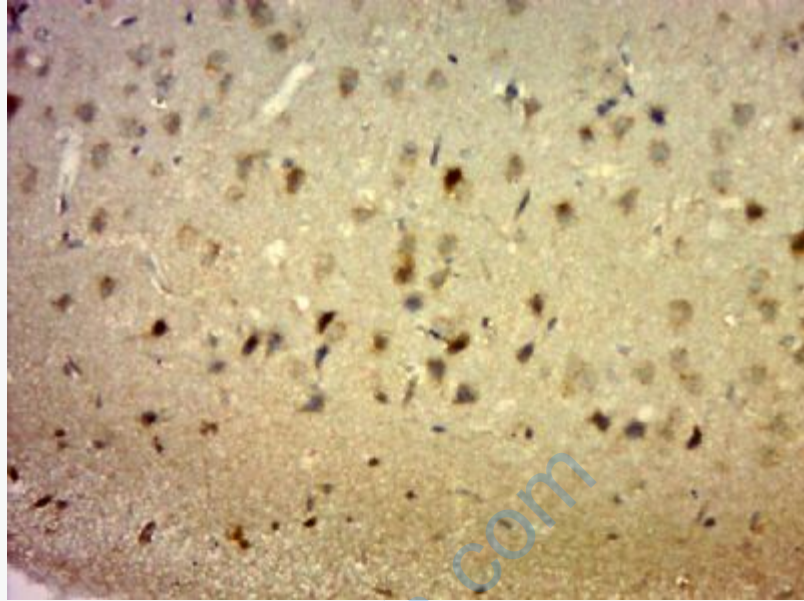
Sample: Lung (Mouse) Lysate at 40 ug

Primary: Anti-p-Bcl-xL(Thr47) (SL12579R) at 1/300 dilution

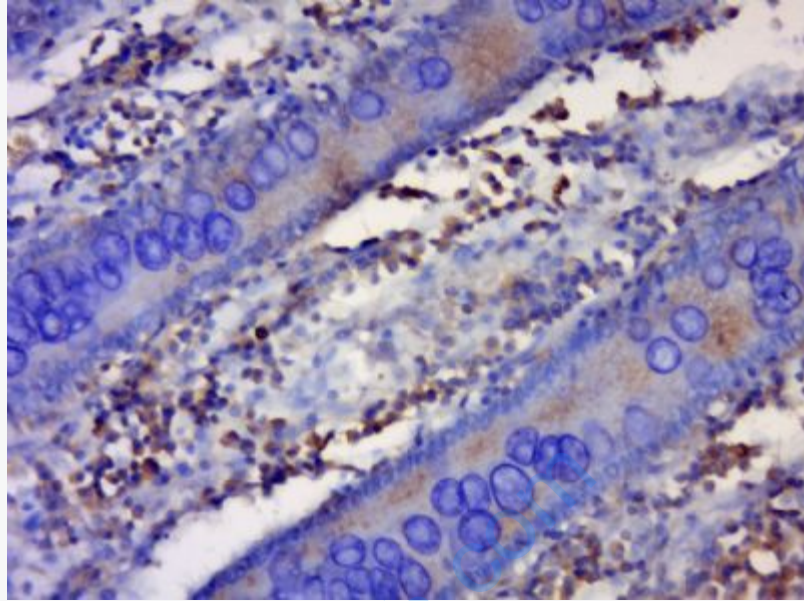
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 26kD

Observed band size: 24kD



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 (phospho-Bcl-xL (Thr47)) Polyclonal Antibody, Unconjugated (SL12579R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (human colon 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 (p-BCL2L1) Polyclonal Antibody, Unconjugated (SL12579R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.