

Rabbit Anti-phospho-Bcl-xL (Ser62)/AP Conjugated antibody

SL1337R-AP

Product Name	Anti-phospho-Bcl-xL (Ser62)/AP
Chinese Name	碱性磷酸酶 (AP) 标记的磷酸化 Bcl-xL(Ser62)抗体
Alias	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; Bclx; DKFZp781P2092; MGC113803; MGC99998; B2CL1_HUMAN.
Product Type	Phosphorylated anti
Research Area	Tumour Cell biology Neurobiology Signal transduction Apoptosis The new supersedes the old Mitochondrion
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human,Rat(predicted:Mouse,Dog,Pig,Cow,Horse,Sheep) IHC-P=1:100-500,IHC-F=1:100-500
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight	26kDa
Form	Lyophilized or Liquid
Concentration	1mg/ml
immunogen	KLH conjugated Synthesised phosphopeptide derived from human Bcl-xL around the phosphorylation site of Ser62
Lsotype	IgG
Purification	affinity purified by Protein A
Storage Buffer	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol. 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 1M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
Storage	

background:

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:

Product Detail

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 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.

Database links:

[Entrez Gene: 598](#) Human

[Entrez Gene: 12048](#) Mouse

[Entrez Gene: 24888](#) Rat

[Omim: 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.

Bcl XL 蛋白是 Bcl 蛋白家族的成员之一,是细胞中抑制 Apoptosis 的重要分子之一, Bcl-XL 是结构上与 Bcl-2 具有 43%同源性的蛋白, 与 Bcl-2 的作用相同,可抑制 Apoptosis, 在 Tumour 的发生和发展中起重要作用。