

Bcl-xl protein

Catalog No :	YD0115
Reactivity :	Human
Applications :	WB;SDS-PAGE
Gene Name :	BCL2L1 BCL2L BCLX
Protein Name :	Bcl-XI
Sequence :	Amino acid: 130-233, with his-MBP tag.
Human Gene Id :	598
Human Swiss Prot No :	Q07817
Mouse Swiss Prot No :	Q64373
Formulation :	Liquid in PBS
Source :	E.coli
Dilution :	WB 1:500-2000
Concentration :	SDS-PAGE >90%
Storage Stability :	-20 °C/6 month,-80 °C for long storage
Background :	domain:The BH4 motif is required for anti-apoptotic activity. The BH1 and BH2 motifs are required for both heterodimerization with other Bcl-2 family members and for repression of cell death.,function:Potent inhibitor of cell death. Isoform Bcl-X(L) anti-apoptotic activity is inhibited by association with SIVA isoform 1. 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, cytochrome c, from the mitochondrial membrane. The Bcl-X(S) isoform promotes apoptosis.,PTM:Proteolytically cleaved by caspases during apoptosis. The cleaved protein, lacking the BH4 motif, has pro-apoptotic activity.,similarity:Belongs to the Bcl-2 family.,subcellular location:Mitochondrial membranes and perinuclear envelope.,subunit:Bcl-X(L)

forms homodimers, and heterodimers with BAX, BAK and BCL2. Heterodimerization with BAX does not seem to be required for anti-apoptotic activity. Also interacts with BAD and BBC3. Isoform Bcl-X(L) binds to Siva isoform 1. Interacts with BCL2L11 (By similarity). Interacts with BECN1 and PGAM5. Isoform Bcl-X(L) interacts with BAX isoform Sigma.,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.,

Function :

response to reactive oxygen species, ovarian follicle development, response to hypoxia, in utero embryonic development, release of cytochrome c from mitochondria, reproductive developmental process, mitochondrial transport, cellular ion homeostasis, apoptosis, anti-apoptosis, response to oxidative stress, mitochondrion organization, mitochondrial membrane organization, gamete generation, germ cell development, spermatogenesis,sex differentiation, cell death, positive regulation of cell proliferation, gonad development, male gonad development,female gonad development, negative regulation of survival gene product expression, apoptotic mitochondrial changes,response to radiation, fertilization, response to abiotic stimulus, response to endogenous stimulus, response to hormone stimulus, embryonic development ending in birth or egg hatching, response to organic substance, response to inorgani

Subcellular Location :

[Isoform Bcl-X(L)]: Mitochondrion inner membrane . Mitochondrion outer membrane . Mitochondrion matrix . Cytoplasmic vesicle, secretory vesicle, synaptic vesicle membrane . Cytoplasm, cytosol . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus membrane ; Single-pass membrane protein ; Cytoplasmic side . After neuronal stimulation, translocates from cytosol to synaptic vesicle and mitochondrion membrane in a calmodulin-dependent manner (By similarity). Localizes to the centrosome when phosphorylated at Ser-49. .

Expression :

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.

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