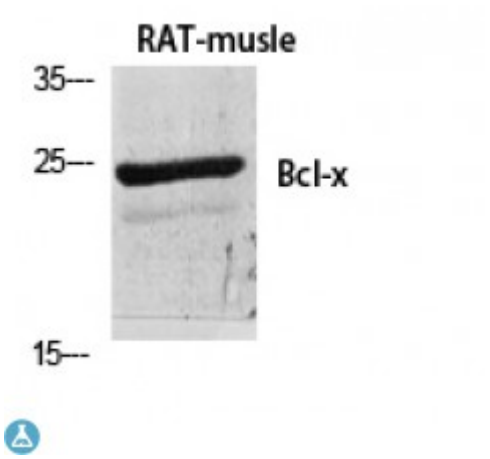
Anti-Bcl-x antibody



Description	Rabbit polyclonal to Bcl-x.

Model	STJ91842
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human Bcl-x around the non-phosphorylation site of T47.
Immunogen Region	30-110 aa
Gene ID	598
Gene Symbol	BCL2L1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:5000
Specificity	Bcl-x Polyclonal Antibody detects endogenous levels of Bcl-x protein.
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.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Bcl-2-like protein 1 Bcl2-L-1 Apoptosis regulator Bcl-X
Molecular Weight	30 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:992OMIM:600039
Alternative Names	Bcl-2-like protein 1 Bcl2-L-1 Apoptosis regulator Bcl-X
Function	Potent inhibitor of cell death. Inhibits activation of caspases. 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. Also acts as a regulator of G2 checkpoint and progression to cytokinesis during mitosis.; Isoform Bcl-X(L) also regulates presynaptic plasticity, including neurotransmitter release and recovery, number of axonal mitochondria as well as size and number of synaptic vesicle clusters. During synaptic stimulation, increases ATP availability from mitochondria through regulation of mitochondrial membrane ATP synthase F(1)F(0) activity and regulates endocytic vesicle retrieval in hippocampal neurons through association with DMN1L and stimulation of its GTPase activity in synaptic vesicles. May attenuate inflammation impairing NLRP1-inflammasome activation, hence CASP1 activation and IL1B release . Isoform Bcl-X(S) promotes apoptosis.
Sequence and Domain Family	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.; The loop between motifs BH4 and BH3 is required for the interaction with NLRP1.
Cellular Localization	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. After neuronal stimulation, translocates from cytosol to synaptic vesicle and mitochondrion membrane in a calmodulin-dependent manner . Localizes to the centrosome when phosphorylated at Ser-49.
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 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.

T +44 (0)208 223 3081 **E** info@stjohnslabs.com