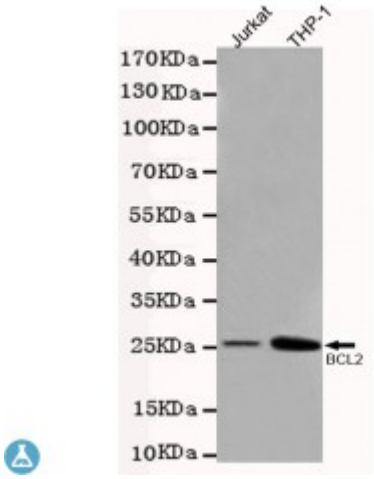
Anti-Bcl-2 antibody



Description	Mouse monoclonal to Bcl-2.

Model	STJ99291
Host	Mouse
Reactivity	Human
Applications	ELISA, WB
Immunogen	Recombinant protein corresponding to fragment (1-195aa) BCL2.
Immunogen Region	1-195 aa
Gene ID	596
Gene Symbol	BCL2
Dilution range	WB 1:500-2000ELISA 1:10000-20000
Specificity	This antibody detects endogenous levels of BCL2.
Tissue Specificity	Expressed in a variety of tissues.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Apoptosis regulator Bcl-2
Molecular Weight	29kDa
Clonality	Monoclonal
Conjugation	Unconjugated

Isotype	IgG2a
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:990OMIM:151430
Alternative Names	Apoptosis regulator Bcl-2
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). May attenuate inflammation by impairing NLRP1-inflammasome activation, hence CASP1 activation and IL1B release .
Sequence and Domain Family	BH1 and BH2 domains are required for the interaction with BAX and for anti-apoptotic activity. The BH4 motif is required for anti-apoptotic activity and for interaction with RAF1 and EGLN3.; The loop between motifs BH4 and BH3 is required for the interaction with NLRP1.
Cellular Localization	Mitochondrion outer membrane Nucleus membrane Endoplasmic reticulum membrane
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 PRKN, leading to increase its stability. Ubiquitinated by SCF(FBXO10), leading to its degradation by the proteasome.