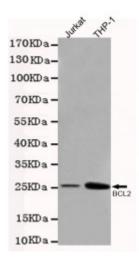


Anti-Bcl-2 antibody



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 <u>596</u>

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

IgG2a **Isotype**

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Store at -20°C, and avoid repeat freeze-thaw cycles. **Storage Instruction**

Database Links HGNC:990OMIM:151430

Apoptosis regulator Bcl-2 **Alternative Names**

Suppresses apoptosis in a variety of cell systems including factor-dependent **Function**

> 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 apoptosisactivating factor (APAF-1). May attenuate inflammation by impairing

> NLRP1-inflammasome activation, hence CASP1 activation and IL1B release.

BH1 and BH2 domains are required for the interaction with BAX and for anti-**Sequence and Domain Family**

> 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 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.

Modifications