

Purified anti-Bcl-2 Antibody

Catalog# / Size	633501 / 25 µg 633502 / 100 µg
Clone	BCL/10C4
Regulatory Status	RUO
Other Names	B-cell leukemia 2
Isotype	Mouse IgG1, κ
Description	Bcl-2 (B-cell leukemia 2) is an apoptotic protein and a member of the Bcl-2 family containing BH1-4 domains. Two reported isoforms exist α=25 kD; β=22 kD. The Bcl-2 protein forms homo- or hetero-dimers with other Bcl-2 family members. Bcl-2 is distributed in the outer mitochondrial membrane, the nuclear envelope, and the endoplasmic reticulum. This protein blocks apoptotic death by controlling mitochondrial membrane permeability. Cleavage of Bcl-2 can convert to pro-apoptotic (by cleavage of BH4 domain). Bcl-2 has been reported to regulate cell cycle progression via ROS. This protein is modified by ASK1/JNK1, PKC, ERKs, and stress-activated kinase phosphorylation and can be ubiquitinated. Bcl-2 has been shown to interact with Apaf-1, Raf-1, TP53BP2, caspase-3, and form heterodimers with Bax, Bad, Bak, Bcl-x _L , and Bag-1. Clone BCL/10C4 has been shown to be useful for Western blotting, immunoprecipitation, and immunofluorescence of the mouse and rat Bcl-2 protein.

Product Details

Verified Reactivity	Mouse, Rat
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	N-terminal, Amino acid residues 61-76 of mouse Bcl-2
Formulation	This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide at 0.5 mg/ml.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	Upon receipt, store undiluted at between 2°C and 8°C.
Application	WB - Quality tested IP, ICC, IHC-F - Reported in the literature, not verified in house
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, suggested working dilution(s): Use 5 µg per 5 ml antibody dilution buffer for each mini-gel. It is recommended that the reagent be titrated for optimal performance for each application.
Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining of frozen tissue ⁴ , immunocytochemical staining ⁵ , and immunoprecipitation ⁵ .
Application References	<ol style="list-style-type: none"> Hsu YT, <i>et al.</i> 1997. <i>J. Biol. Chem.</i> 272:13829. Zuber J, <i>et al.</i> 2011. <i>Genes Dev.</i> 25:1628. (WB) PubMed Doi K, <i>et al.</i> 2012. <i>Biochem Biophys Res Commun.</i> 425:107. PubMed Yamanaka, <i>et al.</i> 2003. <i>J. Immunol.</i> 170:816. (IHC) Conus S, <i>et al.</i> 2000. <i>EMBO J.</i> 19:1534. (WB, IP, ICC)
Product Citations	<ol style="list-style-type: none"> Wei SC, <i>et al.</i> 2019. <i>Immunity.</i> 50:1084. PubMed Tang J, <i>et al.</i> 2018. <i>Front Immunol.</i> 1.702777778. PubMed Lee B, <i>et al.</i> 2019. <i>Front Immunol.</i> 0.561805556. PubMed Zuber J, <i>et al.</i> 2011. <i>Genes Dev.</i> 25:1628. PubMed Doi K, <i>et al.</i> 2012. <i>Biochem Biophys Res Commun.</i> 425:107. PubMed Sochalska M, <i>et al.</i> 2015. <i>Cell Death Differ.</i> 10.1038/cdd.2015.130. PubMed

(PubMed link indicates BioLegend citation)

RRID AB_961017 (BioLegend Cat. No. 633501)
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Antigen Details

Structure	Apoptosis regulator proteins, Bcl-2 family, BH1-4 domains. Homo- or hetero-dimer; isoforms α , β 25 kD, 22 kD
Distribution	Outer mitochondrial membrane, intracellular membrane nuclear envelope, endoplasmic reticulum
Function	Blocks apoptotic death by controlling the mitochondrial membrane permeability. Converted to pro-apoptotic activity by cleavage of BH4 domain. Regulates cell cycle progression via ROS
Modification	Phosphorylation, Ubiquitination
Biology Area	Apoptosis/Tumor Suppressors/Cell Death, Cell Biology, Neuroscience
Antigen References	1. Tsujimoto Y, <i>et al.</i> 1986 <i>P. Natl. Acad. Sci. USA</i> 83:5214. 2. Yang E, <i>et al.</i> 1995. <i>Cell</i> 80:285. 3. Huang Z, <i>et al.</i> 2000. <i>Oncogene</i> 19:6627. 4. Deng X, <i>et al.</i> 2003. <i>Blood</i> . 102:3179.
Regulation	Phosphorylation by ASK1/JNK1, PKC, ERKs, stress-activated kinases
Gene ID	596

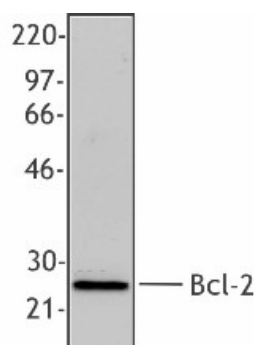
Related Protocols

[Western Blotting Protocol](#)

Other Formats

Purified anti-Bcl-2, FITC anti-Bcl-2, Alexa Fluor® 488 anti-Bcl-2, PE anti-Bcl-2, Alexa Fluor® 647 anti-Bcl-2, PE/Cyanine7 anti-Bcl-2, Direct-Blot™ HRP anti-Bcl-2

Product Data



Western blot analysis of extracts from mouse splenocytes using anti-Bcl-2, clone BCL/10C4.

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