

PE/Cyanine7 anti-Bcl-2 Antibody

Catalog# / Size	633511 / 25 µg 633512 / 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	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with PE/Cyanine7 under optimal conditions.
Concentration	0.2 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining using our nuclear factor staining protocol. For flow cytometric staining, the suggested use of this reagent is ≤0.125 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunohistochemical staining of frozen tissue ⁴ , immunocytochemical staining ⁵ , and immunoprecipitation ⁵ .
Additional Product Notes	BioLegend is in the process of converting the name PE/Cy7 to PE/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our PE/Cyanine7 products. Please contact Technical Service if you have any questions.
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)
(PubMed link indicates BioLegend citation)	

Product Citations

1. Moore MJ *et al.* 2018. eLife. 7 pii: e33057. [PubMed](#)
2. Zenke S, *et al.* 2020. Immunity. 52(2):313-327. [PubMed](#)
3. Harsha Krovi S, *et al.* 2020. Nat Commun. 4.790277778. [PubMed](#)

RRID

AB_2565246 (BioLegend Cat. No. 633511)
AB_2565247 (BioLegend Cat. No. 633512)

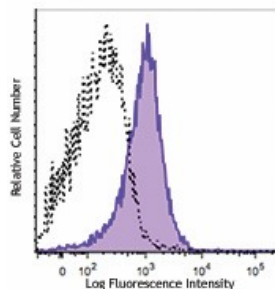
Antigen Details

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	<ol style="list-style-type: none">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

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



C57BL/6 splenocytes were fixed and permeabilized with Nuclear Factor Fixation and Permeabilization Buffer Set, and then were intracellularly stained with Bcl-2 (clone BCL/10C4) PE/Cyanine7 (filled histogram) or mouse IgG1, κ PE/Cyanine7 isotype control (open histogram).

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