

## Bcl-2 (PTR2303) Mouse mAb

CatalogNo: YM3041 **KD/KO Validated** **Orthogonal Validated** 

### Key Features

#### Host Species

- Mouse

#### Reactivity

- Human, Mouse, Rat

#### Applications

- WB, IF, ELISA

#### MW

- 26kD (Calculated)  
26kD (Observed)

#### Isotype

- IgG2b, Kappa

### Storage

**Storage\*** -15°C to -25°C/1 year (Do not lower than -25°C)**Formulation** PBS, 50% glycerol, 0.05% Proclin 300, 0.05% BSA

### Recommended Dilution Ratios

**WB 1:500-2000****IF 1:100-500****ELISA 1:1000-5000**

### Basic Information

**Clonality** Monoclonal**Clone Number** PTR2303

### Immunogen Information

**Immunogen** Synthetic Peptide of human Bcl-2 AA range: 1-100**Specificity** This antibody detects endogenous levels of BCL-2 protein.

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## | Target Information

**Gene name** BCL2

**Protein Name** Apoptosis regulator Bcl-2

Organism	Gene ID	UniProt ID
Human	<a href="#">596</a> ;	<a href="#">P10415</a> ;
Mouse	<a href="#">12043</a> ;	<a href="#">P10417</a> ;
Rat	<a href="#">24224</a> ;	<a href="#">P49950</a> ;

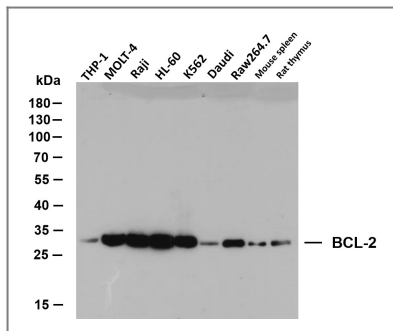
**Cellular Localization** Membranous

**Tissue specificity** Expressed in a variety of tissues.

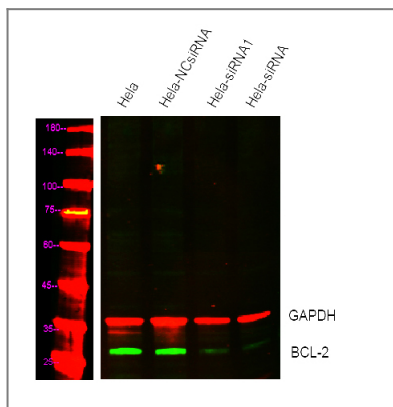
**Function** Disease:A chromosomal aberration involving BCL2 may be a cause of follicular lymphoma (FL) [MIM:151430]; also known as type II chronic lymphatic leukemia. Translocation t(14;18)(q32;q21) with immunoglobulin gene regions. BCL2 mutations found in non-Hodgkin lymphomas carrying the chromosomal translocation could be attributed to the Ig somatic hypermutation mechanism resulting in nucleotide transitions.,Domain:The BH4 motif is required for anti-apoptotic activity and for interaction with RAF-1.,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).,online information:Bcl-2 entry,PTM: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. Dephosphorylated by protein phosphatase 2A (PP2A).,PTM: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.,similarity:Belongs to the Bcl-2 family.,subunit:Forms homodimers, and heterodimers with BAX, BAD, BAK and Bcl-X(L). Heterodimerization with BAX requires intact BH1 and BH2 motifs, and is necessary for anti-apoptotic activity (By similarity). Also interacts with APAF1, RAF-1, TP53BP2, BBC3, BCL2L1, MRPL41 and BNIPL. Binding to FKBP8 seems to target BCL2 to the mitochondria and probably interferes with the binding of BCL2 to its targets.,tissue specificity:Expressed in a variety of tissues.,

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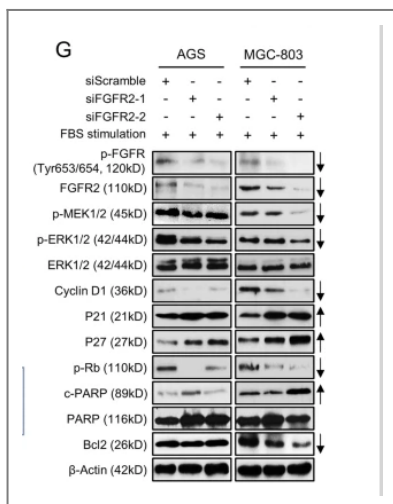
## | Validation Data



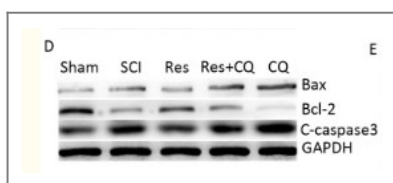
Various whole cell lysates were separated by 10% SDS-PAGE, and the membrane was blotted with anti-BCL-2(PTR2303)antibody. The HRP-conjugated Goat anti-Mouse IgG(H + L) antibody was used to detect the antibody. Lane 1: THP-1 Lane 2: MOLT-4 Lane 3: Raji Lane 4: HL-60 Lane 5: K562 Lane 6: Daudi Lane 7: Raw264.7 Lane 8: Mouse spleen Lane 9: Rat thymus



Western blot analysis of lysates from 1)Hela cell , 2)Hela cells knockdown by siRNA1 (F:GGAUGACUGAGUACCUGAATT,R:UUCAGGUACUCAGUCAUCCTT) siRNA2(F:GUGAUGAAGUACAUCCAUAU,R:AUA AUGGAUGUACUUCAUCAC), (Green) primary antibody was diluted at 1:1000, 4° over night, Dylight 800 secondary antibody(Immunoway:RS23910)was diluted at 1:10000, 37° 1hour. (Red) GAPDH rabbit (Immunoway:YN5585) antibody was diluted at 1:5000 as loading control, 4° over night, Dylight 680 secondary antibody(Immunoway:RS23720)was diluted at 1:10000, 37° 1hour.



Zhang, J., Wong, C.C., Leung, K.T. et al. FGF18-FGFR2 signaling triggers the activation of c-Jun-YAP1 axis to promote carcinogenesis in a subgroup of gastric cancer patients and indicates translational potential. *Oncogene* 39, 6647-6663 (2020).



Wang, Peng, et al. "Resveratrol ameliorates autophagic flux to promote functional recovery in rats after spinal cord injury." *Oncotarget* 9.9 (2018): 8427.

## Contact information

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Please scan the QR code to access additional product information:  
**Bcl-2 (PTR2303)**  
**Mouse mAb**

