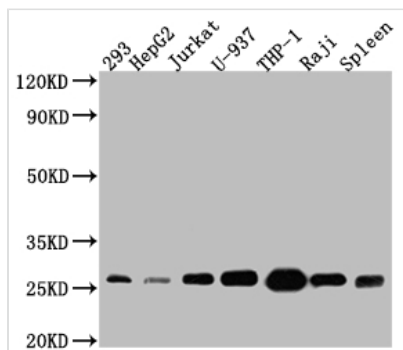




BCL2 Recombinant Monoclonal Antibody

Product Code	CSB-RA564360A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P10415
Immunogen	A synthesized peptide derived from human Bcl-2
Species Reactivity	Human, Mouse
Tested Applications	ELISA, WB, IHC; Recommended dilution: WB:1:500-1:5000, IHC:1:50-1:200
Relevance	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 (PubMed:17418785).
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Cell biology; Metabolism; Signal transduction
Gene Names	BCL2
Clone No.	3F6

Image



Western Blot

Positive WB detected in: 293 whole cell lysate, HepG2 whole cell lysate, Jurkat whole cell lysate, U-937 whole cell lysate, THP-1 whole cell lysate, Raji whole cell lysate, Mouse Spleen whole cell lysate

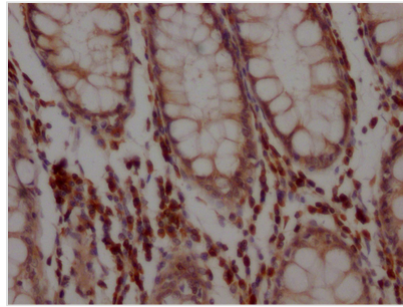
All lanes: Bcl-2 antibody at 1:1000

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 27, 23 kDa

Observed band size: 27 kDa



IHC image of CSB-RA564360A0HU diluted at 1:100 and staining in paraffin-embedded human colon cancer performed on a Leica Bond™ system. After dewaxing and hydration, antigen retrieval was mediated by high pressure in a citrate buffer (pH 6.0). Section was blocked with 10% normal goat serum 30min at RT. Then primary antibody (1% BSA) was incubated at 4? overnight. The primary is detected by a Goat anti-rabbit IgG polymer labeled by HRP and visualized using 0.05% DAB.

Description

The BCL2 recombinant monoclonal antibody is produced through a complex series of steps. The process begins with the harvesting of the BCL2 monoclonal antibody and sequencing of its genetic sequence. Next, a vector carrying the BCL2 monoclonal antibody gene is created and transfected into a host cell line for culturing. A synthesized peptide derived from human BCL2 is used to stimulate the BCL2 monoclonal antibody production. The BCL2 recombinant monoclonal antibody is purified using affinity chromatography to achieve high specificity and purity. Finally, the specificity of the antibody is confirmed using ELISA, WB, and IHC assays to verify its ability to detect BCL2. It reacts with human and mouse BCL2 proteins.

The BCL2 protein plays a key role in regulating apoptosis, which is a programmed cell death process that is essential for normal development and homeostasis in multicellular organisms. BCL2 is an anti-apoptotic protein that promotes cell survival by inhibiting the pro-apoptotic members of the family. BCL2 also plays a role in the regulation of mitochondrial function. BCL2 can interact with and modulate the activity of several mitochondrial proteins, including the voltage-dependent anion channel (VDAC), which regulates mitochondrial outer membrane permeability, and the adenine nucleotide translocator (ANT), which is involved in mitochondrial energy metabolism. It also has a role in the regulation of the cell cycle. Dysregulation of BCL2 expression or function is associated with cancer and resistance to chemotherapy.