

Rabbit BCL-2 Polyclonal Antibody | anti-BCL-2 antibody

Phospho-BCL-2 (Ser87) Antibody

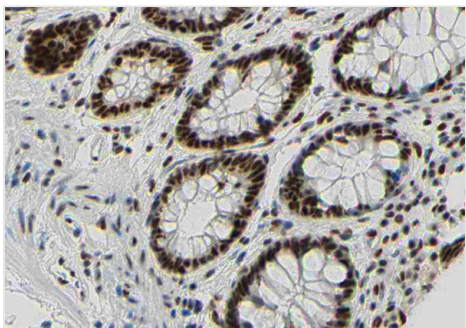
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA321509	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

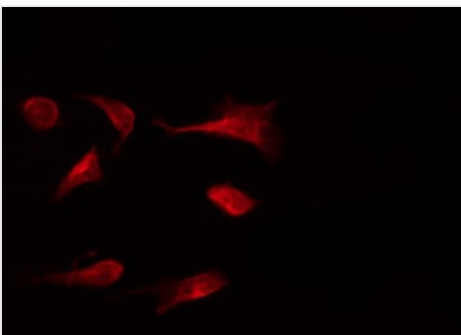
BCL-2; Polyclonal Antibody; Phospho-BCL-2 (Ser87) Antibody; Apoptosis regulator Bcl 2; Apoptosis regulator Bcl-2; Apoptosis regulator Bcl2; AW986256; B cell CLL/lymphoma 2; B cell leukemia/lymphoma 2; Bcl-2; Bcl2; BCL2_HUMAN; C430015F12Rik; D630044D05Rik; D830018M01Rik; Leukemia/lymphoma; B-cell; 2; Oncogene B-cell leukemia 2; PPP1R50; Protein phosphatase 1; regulatory subunit 50; anti-BCL-2 antibody

PRODUCT SPECIFICATIONS

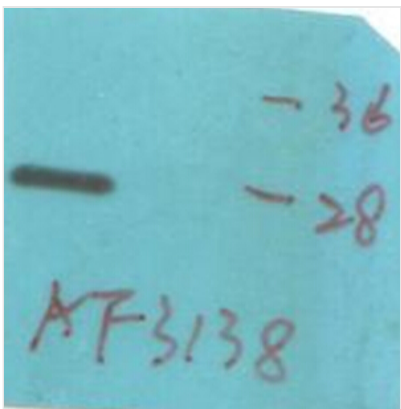
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	Phospho-BCL-2 (Ser87) antibody detects endogenous levels of BCL-2 only when phosphorylated at Serine 87
Purity/Purification	From purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	239
Applicable Applications for anti-BCL-2 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human BCL-2 around the phosphorylation site of Serine 87
Subcellular Location	Mitochondrion Outer Membrane. Nucleus Membrane. Endoplasmic Reticulum Membrane.
Tissue Specificity	Expressed in a variety of tissues.
Conjugation	Unconjugated
Epitope	Phospho Ser87
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



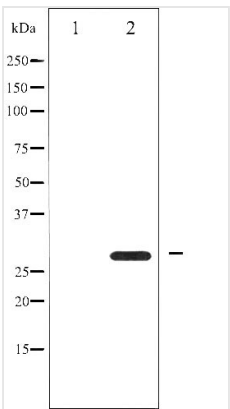
IHC (Immunohistochemistry)
AAA321509 at 1/200 staining human colon carcinoma tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



IF (Immunofluorescence)
AAA321509 staining MCF7 by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)
Western blot analysis of Phospho-BCL-2 (Ser87) Antibody expression in nocodazole treated Hela cells lysates. The lane on the right is treated with the antigen-specific peptide.



WB (Western Blot)
Western blot analysis of BCL-2 phosphorylation expression in nocodazole treated HeLa whole cell lysates, The lane on the left is treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-BCL-2 antibody	Description: This gene encodes an integral outer mitochondrial membrane protein that blocks the apoptotic death of some cells such as lymphocytes. Constitutive expression of BCL2, such as in the case of translocation of BCL2 to Ig heavy chain locus, is thought to be the cause of follicular lymphoma. Two transcript variants, produced by alternate splicing, differ in their C-terminal ends. 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). May attenuate inflammation by impairing NLRP1-inflammasome activation, hence CASP1 activation and IL1B release (PubMed:17418785). Subunit Structure: 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 (PubMed:8183370). Interacts with EI24 (By similarity). Also interacts with APAF1, BBC3, BCL2L1, BNIP1, MRPL41 and TP53BP2. Binding to FKBP8 seems to target BCL2 to the mitochondria and probably interferes with the binding of BCL2 to its targets. Interacts with BAG1 in an ATP-dependent manner. Interacts with RAF1 (the 'Ser-338' and 'Ser-339' phosphorylated form). Interacts (via the BH4 domain) with EGLN3; the interaction prevents the formation of the BAX-BCL2 complex and inhibits the anti-apoptotic activity of BCL2. Interacts with G0S2; this interaction also prevents the formation of the anti-apoptotic BAX-BCL2 complex. Interacts with RTL10/BOP. Interacts with the SCF(FBXO10) complex. Interacts (via the loop between motifs BH4 and BH3) with NLRP1 (via LRR repeats), but not with NLRP2, NLRP3, NLRP4, PYCARD, nor MEFV (PubMed:17418785). Post-translational Modifications: 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) (By similarity). 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. Similarity: BH1 and BH2 domains are required for the interaction with BAX and for anti-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. Belongs to the Bcl-2 family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	72198189
NCBI GeneID	596
NCBI Accession #	NP_000624.2
NCBI GenBank Nucleotide #	NM_000633.2
UniProt Accession #	P10415; P10416; Q13842; Q16197; C9JHD5
Molecular Weight	Observed: 28 kDa Predicted: 27 kDa
NCBI Official Full Name	apoptosis regulator Bcl-2 isoform alpha
NCBI Official Synonym Full Names	BCL2, apoptosis regulator
NCBI Official Symbol	BCL2
NCBI Official Synonym Symbols	Bcl-2; PPP1R50
NCBI Protein Information	apoptosis regulator Bcl-2
UniProt Protein Name	Apoptosis regulator Bcl-2
UniProt Gene Name	BCL2

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

