

BCL2 Protein, Rat (Cell-Free, His)

Cat. No.:	HY-P702223
Synonyms:	Apoptosis regulator Bcl-2
Species:	Rat
Source:	E. coli Cell-free
Accession:	P49950 (M1-K236)
Gene ID:	24224
Molecular Weight:	28.1 kDa

PROPERTIES

AA Sequence	<p> MAQAGRTGYD NREIVMKYIH YKLSQRGYEW DTGDEDSAPL RAAPTPIGIFS FQPESNRTPA VHRDTAARTS PLRPLVANAG PALSPPVPPVV HLTLRRAAGDD FSRRYRRDFA EMSSQLHLTP FTARGRFATV VEELFRDGVN WGRIVAFFEF GGVMCVESVN REMSPLVDNI ALWMTEYLNRL HLHTWIQDNG GWDAFVELYG PSMRPLFDIFS WLSLKTLLSL ALVGACITLG AYLGHK </p>
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 µm filtered solution of Tris/PBS-based buffer, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/µg, determined by LAL method.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 µg/mL in ddH ₂ O. For long term storage it is recommended to add 5-50% of glycerol (final concentration). Our default final concentration of glycerol is 50%. Customers could use it as reference.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	<p>The BCL2 protein is involved in suppressing apoptosis, or programmed cell death, in various cell systems, including factor-dependent lymphohematopoietic and neural cells. It regulates cell death by controlling the permeability of the mitochondrial membrane. BCL2 functions in a feedback loop system with caspases, inhibiting their activity by preventing the release of cytochrome c from the mitochondria and/or binding to the apoptosis-activating factor (APAF-1). Additionally, BCL2 acts as an inhibitor of autophagy, interacting with BECN1 and AMBRA1 to inhibit their autophagy function. It may also</p>
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attenuate inflammation by impairing NLRP1-inflammasome activation, CASP1 activation, and IL1B release. BCL2 forms homodimers and heterodimers with BAX, BAD, BAK, and Bcl-X(L). Heterodimerization with BAX is necessary for its anti-apoptotic activity. BCL2 interacts with various proteins, including EI24, APAF1, BBC3, BCL2L1, BNIPL, MRPL41, TP53BP2, FKBP8, BAG1, RAF1, EGLN3, G0S2, RTL10/BOP, SCF(FBXO10) complex, NLRP1, GIMAP3/IAN4, GIMAP4/IAN1, GIMAP5/IAN5, BCAP31, IRF3, BECN1, and AMBRA1. These interactions have various effects on BCL2 activity, such as targeting it to the mitochondria or inhibiting its anti-apoptotic function.

Caution: Product has not been fully validated for medical applications. For research use only.

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