

## Bcl-2 Polyclonal Antibody

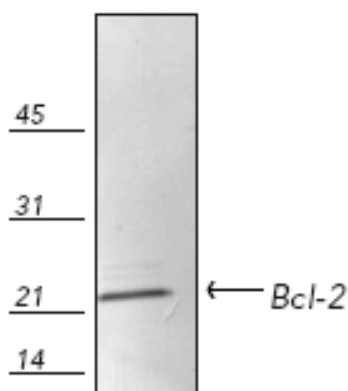
Product Specifications	
<b>Catalog Number:</b>	AAS-070
<b>Host:</b>	Rabbit
<b>Species Reactivity:</b>	Human and monkey
<b>Applications:</b> <i>The optimal dilution for a specific application must be determined by the investigator</i>	<b>WB:</b> 1 µg/mL (ECL) <b>IP:</b> 1:100
<b>Predicted m.w.:</b>	~25 kDa
<b>Concentration:</b>	See product label
<b>Purification:</b>	Protein A Affinity
<b>Format:</b>	PBS, pH 7.2, 50% glycerol, 0.09% azide
<b>Storage:</b> <i>Shipping conditions may differ from the recommended storage temperature</i>	Store at -20°C
<b>Immunogen:</b>	Synthetic peptide derived from the sequence of human Bcl-2 <sup>1</sup> , conjugated to KLH
<b>Related Products:</b>	
LYC-HL101	HeLa Heat Shocked Cell Lysate
900-133	Bcl-2 (human total) EIA Kit
905-328	Bcl-2 $\alpha$ Monoclonal Antibody (SPM117)
AAM-072	Bcl-2 Monoclonal Antibody (83-8B)
AAP-050	Bcl-w Polyclonal Antibody

### Background:

Bcl-2 $\alpha$  and  $\beta$  are alternatively spliced isoforms of 25 kDa and 22 kDa integral membrane proteins that typically inhibit apoptosis; however Bcl-2 can also be pro-apoptotic<sup>1-3</sup>. Bcl-2 is found in the mitochondrial, ER and nuclear membranes, and its subcellular location appears to affect whether it is pro-apoptotic or anti-apoptotic. Bcl-2 becomes pro-apoptotic when it is either cleaved by caspase-3 or targeted to the mitochondrial membrane. When Bcl-2 is targeted to the ER membrane, it protects cells from apoptosis induced by Bax overexpression. ER membrane Bcl-2 may protect against apoptosis by preserving the integrity of the mitochondria after an apoptotic stimulus<sup>3</sup>. Bcl-2 family members are characterized by at least one of four Bcl-2 homology domains (BH1-BH4)<sup>3-4</sup>. Anti-apoptotic Bcl-2 proteins contain BH1-BH4 while pro-apoptotic proteins contain either BH1-BH3 or BH3 alone (e.g., Bad, Bid)<sup>3</sup>.

#### References:

1. Adams, J.M. and Cory, S. (1998) *Science* **281**, 1322-1326.
2. Hockenbery, D., *et al.* (1990) *Nature* **348**, 334-336.
3. Wang, N.S., *et al.* (2001) *J Biol Chem.* **276**(47), 44117-44128.
4. Harris, C.A. and Johnson, E.M. Jr. (2001) *J Biol Chem.* **276**(41), 37754-37760.



Western blot analysis of monkey Vero cell lysate probed with Bcl-2 polyclonal antibody