

Bnip3L (IN) Polyclonal Antibody

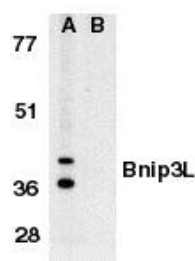
Product Specifications	
Catalog Number:	905-185
Host:	Rabbit
Species Reactivity:	human and mouse
Applications: <i>The optimal dilution for a specific application must be determined by the investigator</i>	WB: 0.5 to 1 µg/mL IHC: 2 µg/mL
Predicted m.w.:	~ 40 kDa
Concentration:	See product label
Purification:	Affinity Purified
Format:	In PBS containing 0.02% sodium azide.
Storage:	-20°C
Immunogen:	Derived from peptide corresponding to amino acids 77 to 92 of human origin.
Related Products:	
SAB-300	Goat anti-Rabbit IgG Polyclonal Antibody, HRP Conjugate
AAP-330	Bim/BOD Polyclonal Antibody
900-133	Bcl-2 (human total) EIA Kit
905-638	Bad Monoclonal Antibody (5E6)

Background:

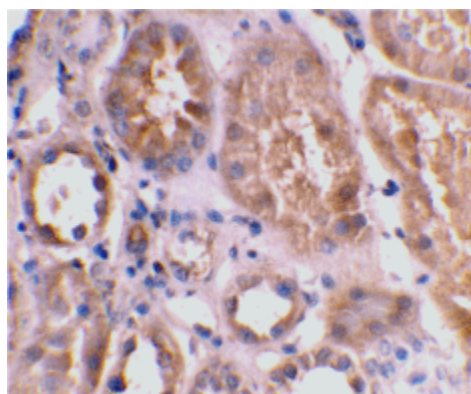
Members in the Bcl-2 family are critical regulators of apoptosis by either inhibiting or promoting cell death. The Bcl-2 homology 3 (BH3) domain is a potent death domain. BH3 domain containing pro-apoptotic proteins, including Bad, Bax, Bid, Bik, Hrk, Nip3, and Bim, form a subclass of the Bcl-2 family. A novel BH3 domain-containing protein was identified and designated Bnip3L, Bnip3 α , and Nix (for Nip3-like protein X)¹⁻³. Bnip3L/Bnip3 α /Nix is a homolog of the E1B 19K/Bcl-2 binding and pro-apoptotic protein Bnip3, both of which are members of the BH3-only subclass of pro-apoptotic Bcl-2 family proteins. Overexpression of Bnip3L induces apoptosis by overcoming suppression of apoptosis by Bcl-2 and Bcl-xL^{2,3}. Bnip3L localizes to the mitochondria, and its messenger RNA is ubiquitously expressed in human tissues^{1,2}. Bnip3L is upregulated in myocardial hypertrophy, resulting in apoptosis of cardiomyocytes⁴.

References:

1. Matsushima, M., *et al.* (1998) *Genes Chromosomes Cancer* **21**, 230-235.
2. Yasuda, M., *et al.* (1999) *Cancer Res.* **59**, 533-537.
3. Chen, G., *et al.* (1999) *J Biol Chem.* **274**, 7-10.
4. Yussman, M.G., *et al.* (2002) *Nat Med.* **8**, 725-730.



Western blot analysis of Bnip3L in K562 whole cell lysate in the absence (A), or presence (B) of immunogenic peptide with anti-Bnip3L (IN) at 1 µg/mL.



Immunohistochemical staining of human kidney tissue using Bnip3L antibody at 2 µg/mL.