

**Puma BH3 Domain Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP1317a**

**Specification**

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**Puma BH3 Domain Antibody - Product Information**

Application	FC, IF, IHC-P, WB,E
Primary Accession	<a href="#">Q9BXH1</a>
Other Accession	<a href="#">Q80ZG6</a> , <a href="#">Q99ML1</a>
Reactivity	Human
Predicted	Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	119-154

**Puma BH3 Domain Antibody - Additional Information**

**Gene ID** 27113

**Other Names**

Bcl-2-binding component 3, JFY-1, p53 up-regulated modulator of apoptosis, BBC3, PUMA

**Target/Specificity**

This Puma BH3 Domain antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 119-154 amino acids from human Puma BH3 Domain.

**Dilution**

FC~~1:10~50

IF~~1:10~50

IHC-P~~1:10~50

WB~~1:1000

E~~Use at an assay dependent concentration.

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

Puma BH3 Domain Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Puma BH3 Domain Antibody - Protein Information**

**Name** BBC3

**Synonyms** PUMA

**Function** Essential mediator of p53/TP53-dependent and p53/TP53- independent apoptosis (PubMed:[11463391](#), PubMed:[23340338](#)). Promotes partial unfolding of BCL2L1 and dissociation of BCL2L1 from p53/TP53, releasing the bound p53/TP53 to induce apoptosis (PubMed:[23340338](#)). Regulates ER stress-induced neuronal apoptosis (By similarity).

**Cellular Location**

Mitochondrion Note=Localized to the mitochondria in order to induce cytochrome c release

**Tissue Location**

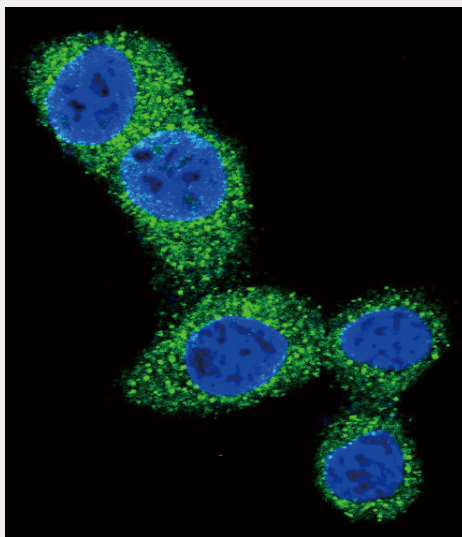
Ubiquitously expressed.

**Puma BH3 Domain Antibody - Protocols**

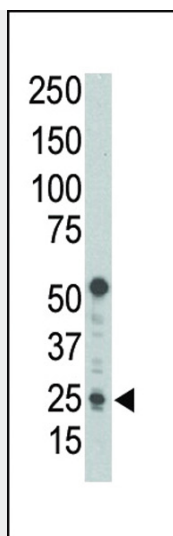
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

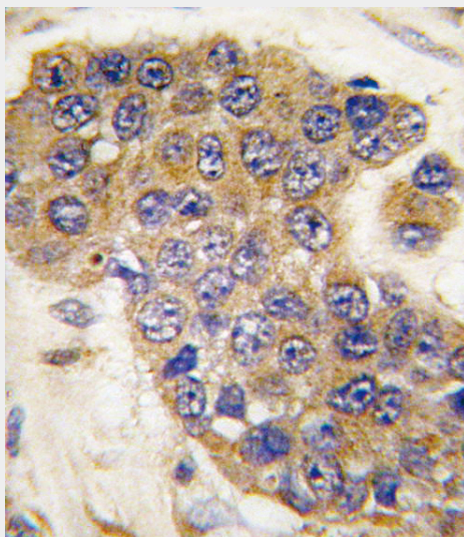
**Puma BH3 Domain Antibody - Images**



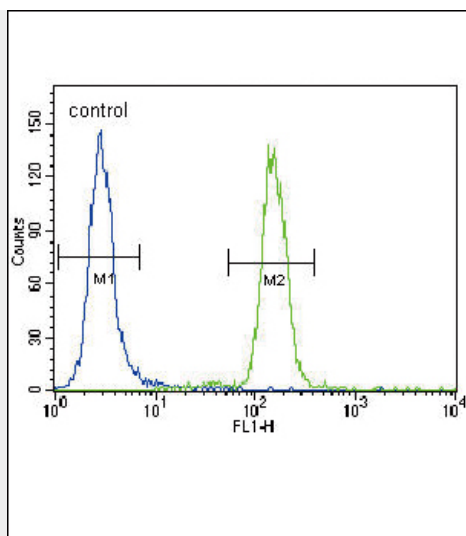
Confocal immunofluorescent analysis of Puma BH3 Domain Antibody(Cat#AP1317a) with HeLa cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).



Western blot analysis of anti-Puma BH3 domain Pab (Cat. #AP1317a) in HL-60 cell lysate. Puma BH3 domain (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with Puma BH3 Domain antibody (Cat.#AP1317a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Puma BH3 Domain Antibody (Cat. #AP1317a) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

### **Puma BH3 Domain Antibody - Background**

PUMA is one of the pro-apoptotic Bcl-2 family members including Bax and Noxa, which are also transcriptional targets of p53. The PUMA gene encodes two BH3 domain-containing proteins termed PUMA-a and PUMA-b. PUMA proteins bind Bcl-2, localize to the mitochondria, and induce cytochrome c release and apoptosis in response to p53. PUMA may be a direct mediator of p53-induced apoptosis.

### **Puma BH3 Domain Antibody - References**

Liu, F.T., et al., Biochem. Biophys. Res. Commun. 310(3):956-962 (2003). Hoque, M.O., et al., Cancer Lett. 199(1):75-81 (2003). Yu, J., et al., Proc. Natl. Acad. Sci. U.S.A. 100(4):1931-1936 (2003). Han, J., et al., Proc. Natl. Acad. Sci. U.S.A. 98(20):11318-11323 (2001). Nakano, K., et al., Mol. Cell 7(3):683-694 (2001).

### **Puma BH3 Domain Antibody - Citations**

- [Detection of Bim and Puma in mouse hair follicles using immunofluorescence and TUNEL assay double staining.](#)