

# **Puma BH3 Domain Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1317a

# **Specification**

# Puma BH3 Domain Antibody - Product Information

Application IF, WB, IHC-P,

FC,E

Primary Accession <a href="Q9BXH1">Q9BXH1</a>

Other Accession <u>Q80ZG6</u>, <u>Q99ML1</u>

Reactivity
Predicted
Host
Clonality
Isotype
Antigen Region

Human
Mouse, Rat
Rabbit
Polyclonal
Rabbit Ig
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

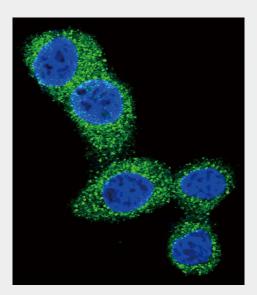
IF~~1:10~50 WB~~1:1000 IHC-P~~1:10~50 FC~~1:10~50

#### **Format**

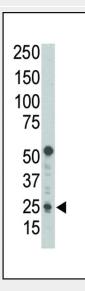
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

# Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C



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



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: <a href="http://www.uniprot.org/c itations/11463391" target="\_blank">11463391</a>). Functions by promoting partial unfolding of BCL2L1 and dissociation of BCL2L1 from p53/TP53. Regulates ER stress-induced neuronal apoptosis (PubMed: <a href="http://www.uniprot.org/citations/23340338" target="blank">23340338</a>).

# **Cellular Location**

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

## **Tissue Location**

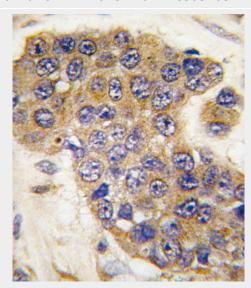
Ubiquitously expressed.

## **Puma BH3 Domain Antibody - Protocols**

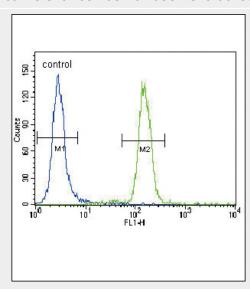
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## visualization with chemiluminescence.

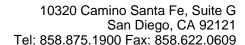


Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with Puma BH3 Domain antibody (Cat.#AP1317a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has 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**

• <u>Detection of Bim and Puma in mouse hair follicles using immunofluorescence and TUNEL assay double staining.</u>