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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	Q9BXH1
Other Accession	Q80ZG6, Q99ML1
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
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 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

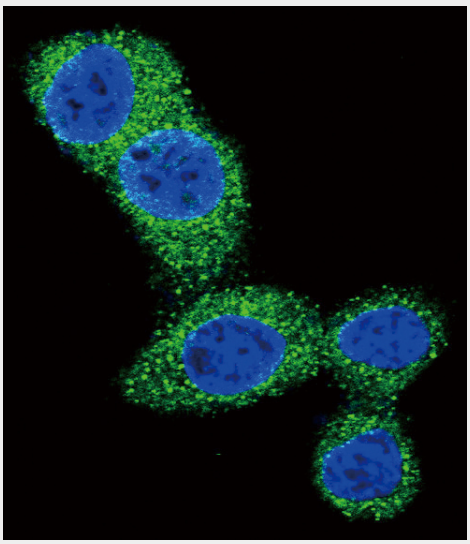
Tissue Location
Ubiquitously expressed.

Puma BH3 Domain Antibody - Protocols

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

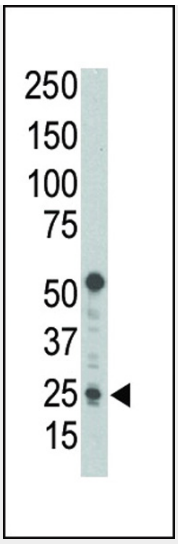
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Puma BH3 Domain Antibody - Images

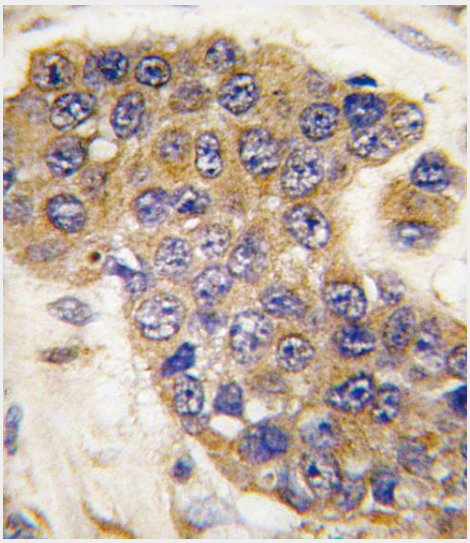


Confocal immunofluorescent analysis of Puma BH3 Domain Antibody(Cat#AP1317a) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green).DAPI was used to stain the cell nuclear (blue).

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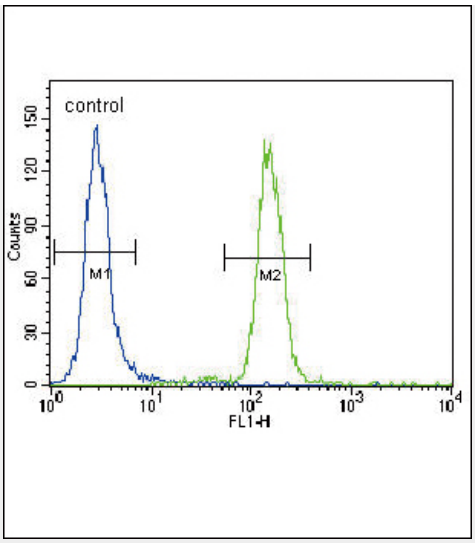


Western blot analysis of anti-Puma BH3 domain Pab (Cat. #AP1317a) in HL-60 cell lysate. Puma BH3 domain (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.



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.

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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.