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PUMA Antibody
Catalog # ASC10175

Specification

PUMA Antibody - Product Information

Application	**WB, IF, ICC, E**
Primary Accession	Q96PG8
Other Accession	NP_055232, 15193488
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**23 kDa KDa**
Application Notes	**PUMA antibody can be used for detection of PUMA by Western blot at 2 µg/mL. Antibody can also be used for immunocytochemstry at 1 µg/mL. For immunofluorescence start at 2 µg/mL.**

PUMA Antibody - Additional Information

Gene ID **27113**

Other Names
PUMA Antibody: JFY1, PUMA, JFY-1, Bcl-2-binding component 3, BCL2 binding component 3

Target/Specificity
BBC3; A lower band at approximately 16 kDa was detected in MOLT4 and U937 cells, which may represent the PUMA-b form.

Reconstitution & Storage
PUMA antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Precautions
PUMA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

PUMA Antibody - Protein Information

Name BBC3

Synonyms PUMA

Function
[Isoform 3]: Does not affect cell growth.

Cellular Location
Note=Contrary to isoforms 1 and 2, isoform 3 does not localize to the mitochondria

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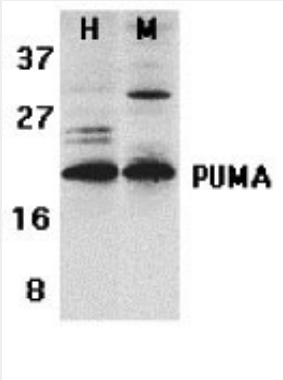
PUMA Antibody - Protocols

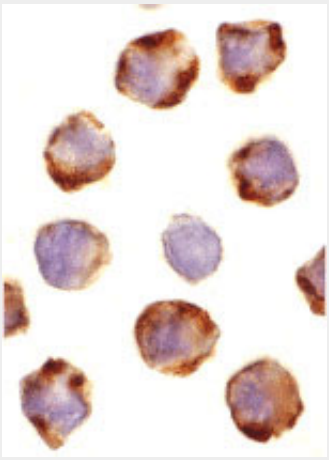
Provided below are standard protocols that you may find useful for product applications.

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

PUMA Antibody - Images



Western blot analysis of PUMA expression in human (H) K562 and mouse (M) 3T3 cell lysates with PUMA antibody at 2 µg/ml



Immunocytochemistry of PUMA in K562 cells with PUMA antibody at 1 µg/mL.

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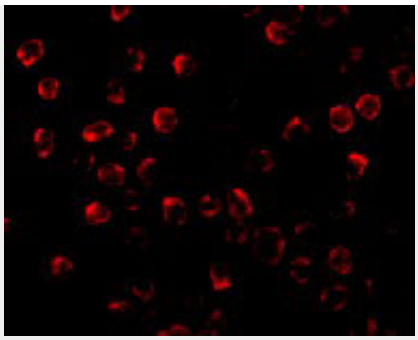

Immunofluorescence of PUMA in K562 cells with PUMA antibody at 2 µg/mL.

PUMA Antibody - Background

PUMA Antibody: Apoptosis is related to many diseases and development. The p53 tumor-suppressor protein induces apoptosis through transcriptional activation of several genes. A novel p53 inducible pro-apoptotic gene was identified recently and designated PUMA (for p53 upregulated modulator of apoptosis) and bbc3 (for Bcl-2 binding component 3) in human and mouse. PUMA/bbc3 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-alpha and PUMA-beta. 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 Antibody - References

Nakano K, Vousden KH. PUMA, a novel proapoptotic gene, is induced by p53. Mol Cell. 2001;7(3):683-94.
Han J, Flemington C, Houghton AB , Gu Z, Zambetti GP, Lutz RJ, Zhu L, Chittenden T. Expression of bbc3, a pro-apoptotic BH3-only gene, is regulated by diverse cell death and survival signals. Proc Natl Acad Sci U S A. 2001;98(20):11318-23.