10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PUMA Antibody

Catalog # ASC10175

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	26498
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
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.

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.

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

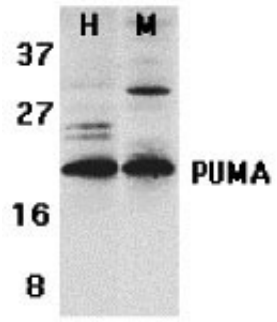
Background

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.

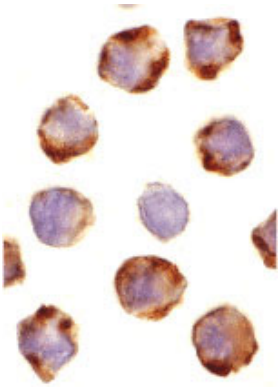
References

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.

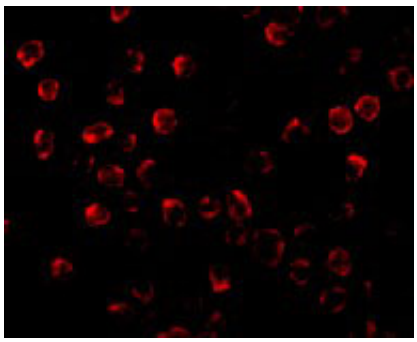
Images



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.



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.