

Instruction Manual

Catalog Number	PK-AB718-3041
Synonyms	PUMA Antibody: bbc3
Description	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- α and PUMA- β . 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.
Quantity	100 μ g
Source / Host	Rabbit
Immunogen	Rabbit polyclonal PUMA antibody was raised against a synthetic peptide corresponding to 14 amino acids near the carboxy terminus of human PUMA- α (GenBank Accession number Q9BXH1). This sequence is identical between α and β -forms of the PUMA proteins.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse
Specificity	A lower band at approximately 16 kDa was detected in MOLT4 and U937 cells, which may represent the PUMA-b form.
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 μ l or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C 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.
Applications	E, WB, ICC, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually.h application have to be determined individually. PUMA antibody can be used for detection of PUMA by Western blot at 2 μ g/mL. A band at approximately 23 kDa can be detected. Immunocytochemistry and immunofluorescence at 1 μ g/mL. For immunofluorescence start at 2 μ g/mL.
Images	Available upon request.
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	Available upon request.
Related Products	Blocking Peptide, Cat. No. PK-AB718-3041P K562 Cell Lysate, Cat. No. PK-AB718-1204 PUMA Antibody (NT), Cat. No. PK-AB718-3043 Bcl-2 Antibody (NT), Cat. No. PK-AB718-3335
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