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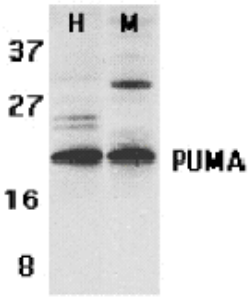
Anti-Human/Mouse PUMA Purified

Catalog Number: 14-6041
Also Known As:bbc3, p53 upregulated modulator of apoptosis
RUO: For Research Use Only. Not for use in diagnostic procedures.



Immunoblot analysis of reduced human K562 cell lysate (lane H) or mouse NIH3T3 cell lysate (lane M) using Anti-Human/Mouse PUMA Purified (2 ug/mL) and detected using Anti-Rabbit IgG-HRP.

Product Information

Contents: Anti-Human/Mouse PUMA Purified
REF **Catalog Number:** 14-6041
Clone: Polyclonal
Concentration: 1 mg/mL
Host/Isotype: Rabbit IgG

Formulation: This product is supplied as purified IgG in PBS containing 0.02% sodium azide
Temperature Limitation: Store at 2-8°C.
LOT **Batch Code:** Refer to Vial
Use By: Refer to Vial
Caution, contains Azide

Description

The polyclonal antibody reacts with human and mouse PUMA. The antibody was raised against a synthetic peptide (plprghrapemepn) corresponding to amino acids 180 to 193 of human PUMA-α. This sequence is identical in α and β forms of the PUMA proteins. 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.

Applications Reported

This polyclonal antibody has been reported for use in immunoblotting (WB).

Applications Tested

This polyclonal antibody has been tested by immunoblotting (WB) (1-2 µg/ml). K562 or 3T3 cell lysate can be used as a positive control and a band at approximately 23 kDa can be detected. A lower band at approximately 16 kDa was detected in MOLT4 and U937 cells, which may represent the PUMA-β form. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Nakano K, Vousden KH. 2001. PUMA, a novel proapoptotic gene, is induced by p53. Mol Cell. Mar;7(3):683-94.Yu J, Zhang L, Hwang PM, Kinzler KW, Vogelstein B. 2001. PUMA induces the rapid apoptosis of colorectal cancer cells. Mol Cell. Mar;7(3):673-82.

Han J, Flemington C, Houghton AB, Gu Z, Zambetti GP, Lutz RJ, Zhu L, Chittenden T. 2001. 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. Sep 25;98(20):11318-23.

Related Products

18-8816 Rabbit TrueBlot®: Anti-Rabbit IgG HRP

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