

**Anti-PUMA Antibody**  
Catalog # ABO10638**Specification****Anti-PUMA Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#">Q9BXH1</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**Description**

Rabbit IgG polyclonal antibody for Bcl-2-binding component 3(BBC3) detection. Tested with WB in Human;Mouse;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-PUMA Antibody - Additional Information**

**Gene ID** 27113

**Other Names**

Bcl-2-binding component 3, JFY-1, p53 up-regulated modulator of apoptosis, BBC3, PUMA

**Calculated MW**

20532 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<br>

**Subcellular Localization**

Mitochondrion . Localized to the mitochondria in order to induce cytochrome c release.

**Tissue Specificity**

Ubiquitously expressed. .

**Protein Name**

Bcl-2-binding component 3

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human PUMA(145-159aa ADDLNAQYERRRQEE), identical to the related rat and mouse sequences.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins

**Storage**

**At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.**

**Sequence Similarities**

Belongs to the Bcl-2 family.

**Anti-PUMA Antibody - Protein Information**

**Name** BBC3

**Synonyms** PUMA

**Function**

Essential mediator of p53/TP53-dependent and p53/TP53-independent apoptosis (PubMed: [11463391](http://www.uniprot.org/citations/11463391), PubMed: [23340338](http://www.uniprot.org/citations/23340338)). Promotes partial unfolding of BCL2L1 and dissociation of BCL2L1 from p53/TP53, releasing the bound p53/TP53 to induce apoptosis (PubMed: [23340338](http://www.uniprot.org/citations/23340338)). Regulates ER stress-induced neuronal apoptosis (By similarity).

**Cellular Location**

Mitochondrion Note=Localized to the mitochondria in order to induce cytochrome c release

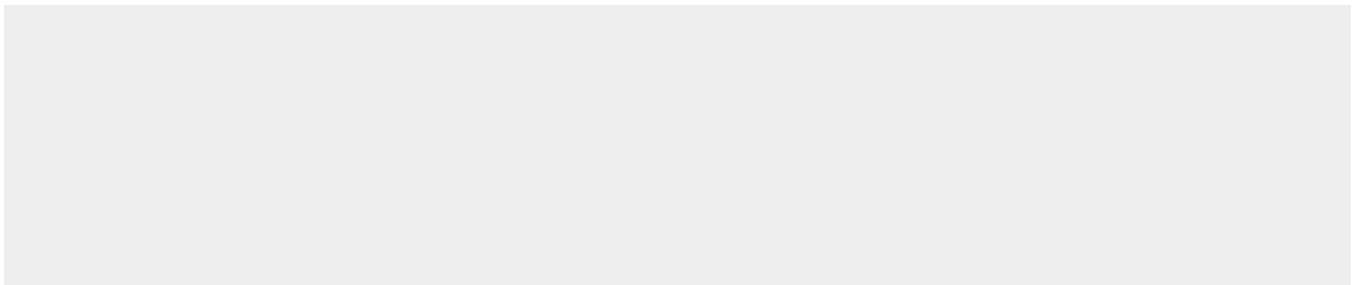
**Tissue Location**

Ubiquitously expressed.

**Anti-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 Cytometry](#)
- [Cell Culture](#)

**Anti-PUMA Antibody - Images**



Anti-PUMA antibody, ABO10638, Western blotting All lanes: Anti PUMA(ABO10638) at 0.5ug/ml Lane 1: HELA Whole Cell Lysate at 40ug Lane 2: Rat Kidney Tissue Lysate at 50ug Predicted bind size: 21KD Observed bind size: 21KD

#### **Anti-PUMA Antibody - Background**

The p53 upregulated modulator of apoptosis, or PUMA, is a pro-apoptotic member of the Bcl-2 protein family. The PUMA gene is located at 19q. PUMA transcript is contained within 4 exons, with the presumptive initiation codon in exon 2. The predicted 193-amino acid PUMA protein shares 91% amino acid identity with the murine sequence. Bcl-2 family members can form hetero- or homodimers, and they act as anti- or pro-apoptotic regulators that are involved in a wide variety of cellular activities. The expression of PUMA is regulated by the tumor suppressor p53, and PUMA has been shown to be involved in p53-mediated apoptosis. Additionally, PUMA encodes 2 BH3 domain-containing proteins, PUMA-alpha and PUMA-beta, that are produced through the use of an alternative first exon and are induced in cells following p53 activation. Furthermore, PUMA couples the nuclear and cytoplasmic proapoptotic functions of p53.