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Anti-PUMA Antibody
Catalog # ABO10638

Specification

Anti-PUMA Antibody - Product Information

Application	**WB**
Primary Accession	Q9BXH1
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

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

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 Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

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 r˚Constitution, 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, PubMed:23340338). Promotes partial unfolding of BCL2L1 and dissociation of BCL2L1 from p53/TP53, releasing the bound p53/TP53 to induce apoptosis (PubMed: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 Cytomety
- Cell Culture

Anti-PUMA Antibody - Images

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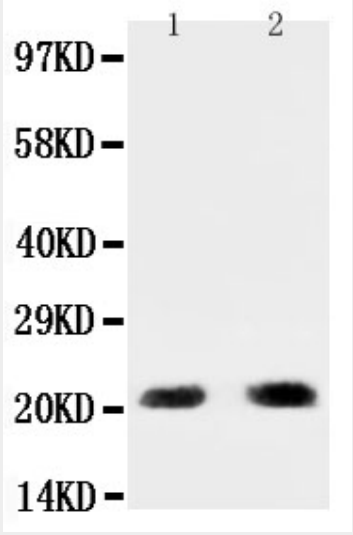

Anti-PUMA antibody, ABO10638, Western blottingAll lanes: Anti PUMA(ABO10638) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: Rat Kidney Tissue Lysate at 50ugPredicted bind size: 21KDObserved bind size: 21KD

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.