

For Research Use Only

# PUMA Polyclonal antibody

Catalog Number: 55120-1-AP

Featured Product

74 Publications



## Basic Information

**Catalog Number:**

55120-1-AP

**Source:**

Rabbit

**Isotype:**

IgG

**GenBank Accession Number:**

NM\_014417

**GeneID (NCBI):**

27113

**UNIPROT ID:**

Q9BXH1

**Full Name:**

BCL2 binding component 3

**Calculated MW:**

21 kDa

**Observed MW:**

18-21 kDa

**Purification Method:**

Antigen affinity purification

**Recommended Dilutions:**

WB: 1:500-1:3000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:100-1:500

## Applications

**Tested Applications:**

WB, IHC, IP, ELISA

**Cited Applications:**

WB, IHC

**Species Specificity:**

human, mouse, rat

**Cited Species:**

human, mouse, rat, zebrafish

**Positive Controls:**

WB : SH-SY5Y cells, SK-N-SH cells, mouse brain tissue, rat brain tissue

IP : mouse heart tissue,

IHC : human testis tissue, human prostate cancer tissue

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

## Background Information

PUMA, also named as JFY-1 and BBC3, belongs to the Bcl-2 family. It is a critical mediator of p53-dependent and -independent apoptosis induced by a wide variety of stimuli. It serves as a proximal signaling molecule whose expression is regulated by transcription factors in response to these stimuli. PUMA transduces death signals primarily to the mitochondria, where it acts indirectly on the Bcl-2 family members Bax and/or Bak by relieving the inhibition imposed by antiapoptotic members. It directly binds and antagonizes all known antiapoptotic Bcl-2 family members to induce mitochondrial dysfunction and caspase activation. PUMA ablation or inhibition leads to apoptosis deficiency underlying increased risks for cancer development and therapeutic resistance. It is a general sensor of cell death stimuli and a promising drug target for cancer therapy and tissue damage. It is essential mediator of p53-dependent and p53-independent apoptosis (PMID: 19641508). Catalog #55120-1-AP can recognize PUMA alpha 21-24 kDa and PUMA beta 15-18 kDa.

## Notable Publications

Author	Pubmed ID	Journal	Application
Emily Filichia	27619562	Sci Rep	WB
Yang Gao	32932732	Int J Mol Sci	WB
Junwei Du	32891613	Life Sci	WB

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

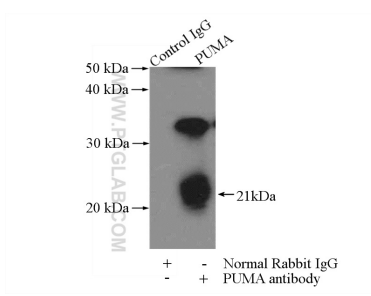
T: 4006900926

E: Proteintech-CN@ptglab.com

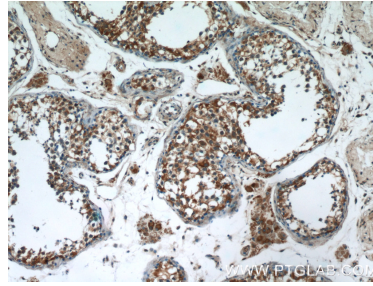
W: ptgcn.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

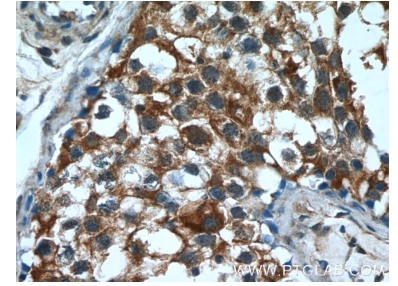
## Selected Validation Data



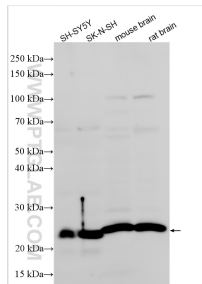
IP result of anti-PUMA (IP:55120-1-AP, 4ug; Detection:55120-1-AP 1:500) with mouse heart tissue lysate 3200ug.



Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 55120-1-AP (PUMA Antibody) at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human testis tissue slide using 55120-1-AP (PUMA Antibody) at dilution of 1:200 (under 40x lens).



Various lysates were subjected to SDS PAGE followed by western blot with 55120-1-AP (PUMA antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.