

For Research Use Only

PUMA Polyclonal antibody

Catalog Number: 55120-1-AP

Featured Product

66 Publications



Basic Information

Catalog Number:

55120-1-AP

Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

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, IP, IHC, ELISA

Cited Applications:

WB, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, zebrafish

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

Positive Controls:

WB : mouse heart tissue, rat heart tissue

IP : mouse heart tissue,

IHC : human testis tissue, human prostate cancer tissue

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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

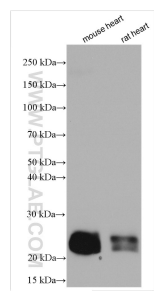
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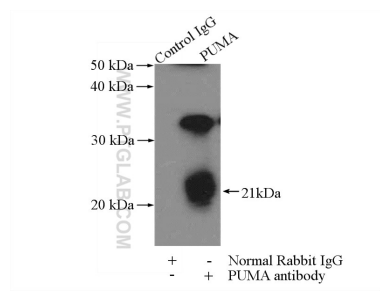
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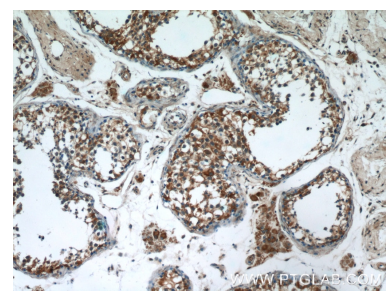
Selected Validation Data



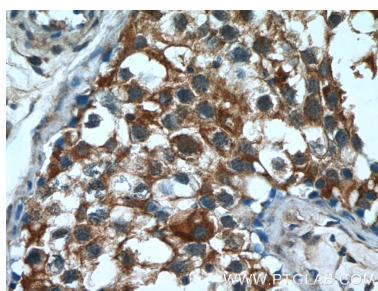
Various lysates were subjected to SDS PAGE followed by western blot with 55120-1-AP (PUMA antibody) at dilution of 1:1500 incubated at room temperature for 1.5 hours.



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).