

For Research Use Only

# PARP1 Polyclonal antibody

Catalog Number: 22999-1-AP

Featured Product

7 Publications



## Basic Information

### Catalog Number:

22999-1-AP

### Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG19173

### GenBank Accession Number:

BC037545

### GeneID (NCBI):

142

### UNIPROT ID:

P09874

### Full Name:

poly (ADP-ribose) polymerase 1

### Calculated MW:

1014 aa, 113 kDa

### Observed MW:

113-116 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:16000

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

IHC 1:50-1:500

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, FC (Intra), IP, ELISA

### Cited Applications:

WB

### Species Specificity:

human, mouse

### Cited Species:

human, rat

### Positive Controls:

WB : HEK-293 cells, Jurkat cells, K-562 cells

IP : K-562 cells,

IHC : human lung cancer tissue, human breast cancer tissue

IF/ICC : Neuro-2a cells,

**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

PARP1 (poly(ADP-ribose) polymerase 1) is a nuclear enzyme catalyzing the poly(ADP-ribosyl)ation of many key proteins in vivo. The normal function of PARP1 is the routine repair of DNA damage. Activated by DNA strand breaks, the PARP1 is cleaved into an 85 to 89-kDa COOH-terminal fragment and a 24-kDa NH2-terminal peptide by caspases during the apoptotic process. The appearance of PARP fragments is commonly considered as an important biomarker of apoptosis. In addition to caspases, other proteases like calpains, cathepsins, granzymes and matrix metalloproteinases (MMPs) have also been reported to cleave PARP1 and gave rise to fragments ranging from 42-89-kD. This antibody was generated against the N-terminal region of human PARP1 and it recognizes the full-length as well as the cleavage of the PARP1.

## Notable Publications

Author	Pubmed ID	Journal	Application
Mingming Yang	35648484	Nucleic Acids Res	WB
Yongxiang Zou	28938551	Oncotarget	WB
Xiaosong Wei	32194406	Front Pharmacol	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

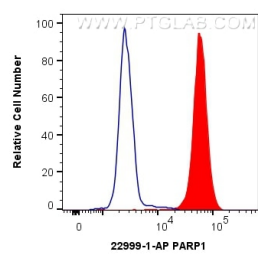
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

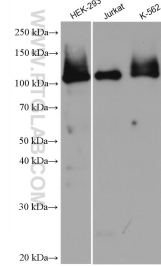
E: proteintech@ptglab.com  
W: ptglab.com

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

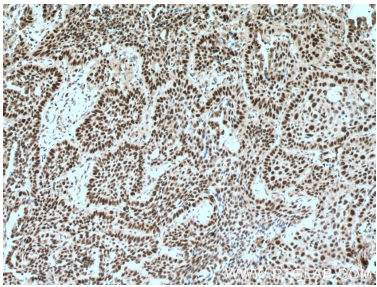
Selected Validation Data



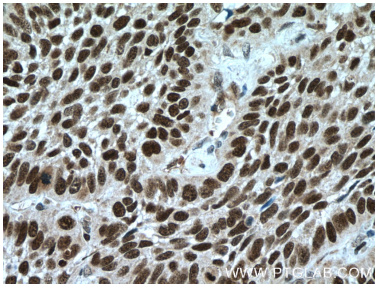
1X10<sup>6</sup> K-562 cells were intracellularly stained with 0.4 ug Anti-Human PARP1 (22999-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



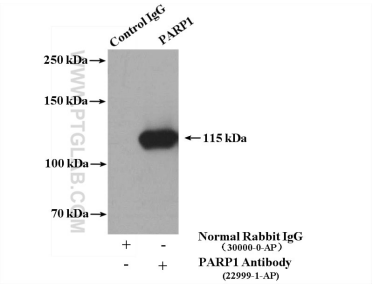
Various lysates were subjected to SDS PAGE followed by western blot with 22999-1-AP (PARP1 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



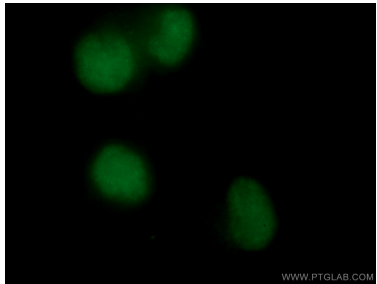
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 22999-1-AP (PARP1 antibody) at dilution of 1:200 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 22999-1-AP (PARP1 antibody) at dilution of 1:200 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-PARP1 (IP:22999-1-AP, 4ug; Detection:22999-1-AP 1:1000) with K-562 cells lysate 3200ug.



Immunofluorescent analysis of (4% PFA) fixed Neuro-2a cells using 22999-1-AP (PARP1 antibody) at dilution of 1:50 and CoraLite488-Conjugated Goat Anti-Rabbit IgG(H+L).