For Research Use Only

PARP1 Polyclonal antibody

Catalog Number:13371-1-AP Featured Product 941 Publications

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Basic Information

Catalog Number:
13371-1-AP

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

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG4193

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, 89 kDa

Purification Method:
Antigen affinity purification

Recommended Dilutions:
WB: 1:1000-1:8000
IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate
IHC: 1:1000-1:4000
IF-P: 1:50-1:500
IF/ICC: 1:50-1:500
FC (Intra): 0.40 ug per 10^6 cells in a 100 ul suspension

Applications

Tested Applications:
WB, IHC, IF/ICC, IF-P, FC (Intra), IP, ELISA

Cited Applications:
WB, IHC, IF, IP, CoIP, ChIP, RIP, Immunofluorescence, CUT&Tag

Species Specificity:
human, mouse, rat

Cited Species:
human, mouse, rat, pig, canine, monkey, chicken, bovine, sheep

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 : HeLa cells, Jurkat cells, C6 cells, Fas antibody treated HeLa cells, Cobalt Chloride treated HeLa cells, THP-1 cells

IP : K-562 cells,

IHC : mouse colon tissue, human breast cancer tissue, human lung cancer tissue, mouse testis tissue

IF-P : mouse testis tissue,

IF/ICC : HEK-293 cells, MCF-7 cells

FC (Intra) : K-562 cells,

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-kDa. This antibody was generated against the C-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
Di Cui	36175877	BMC Cancer	WB
Faisal Aziz	26427350	Toxicol In Vitro	WB
Lei Zhang	34592228	Life Sci	WB

Storage

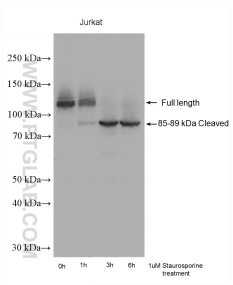
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

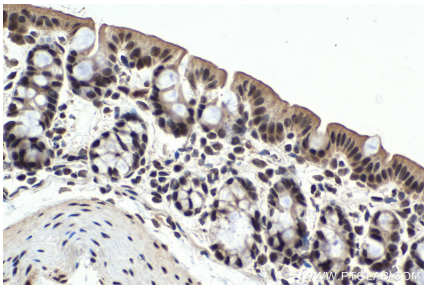
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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

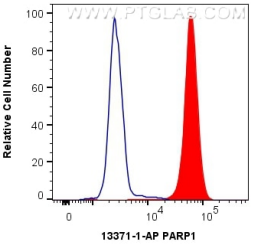
Selected Validation Data



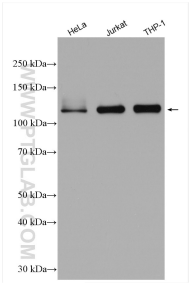
Jurkat cells (25 µg/lane) were subjected to SDS PAGE followed by western blot with 13371-1-AP (PARP1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



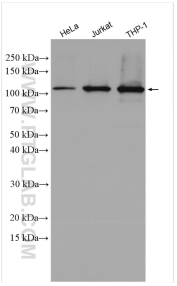
Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 13371-1-AP (PARP1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



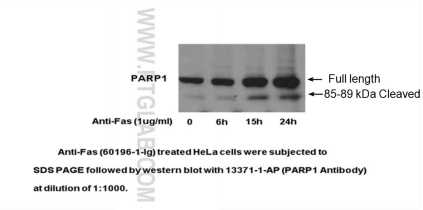
1X10^6 K-562 cells were intracellularly stained with 0.4 ug Anti-Human PARP1 (13371-1-AP) and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011).



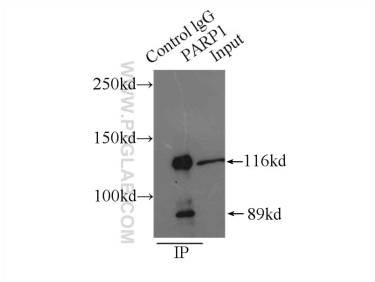
Various lysates were subjected to SDS PAGE followed by western blot with 13371-1-AP (PARP1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



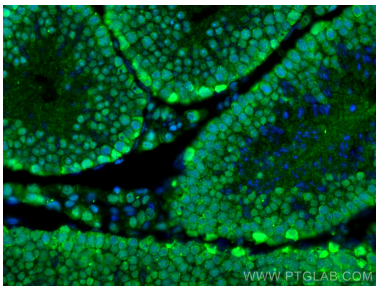
Various lysates were subjected to SDS PAGE followed by western blot with 13371-1-AP (PARP1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



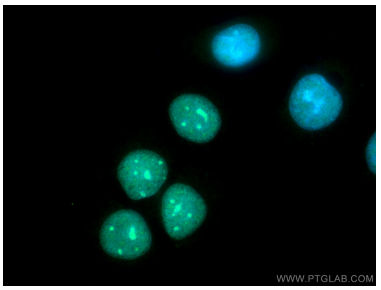
Anti-Fas treated HeLa cells were subjected to SDS PAGE followed by western blot with 13371-1-AP (PARP1 Antibody) at dilution of 1:1000 incubated at 4 degree celsius over night.



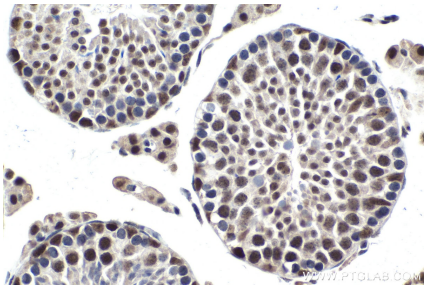
IP result of anti-PARP1 (IP:13371-1-AP, 4ug; Detection:13371-1-AP 1:600) with K-562 cells lysate 5000ug.

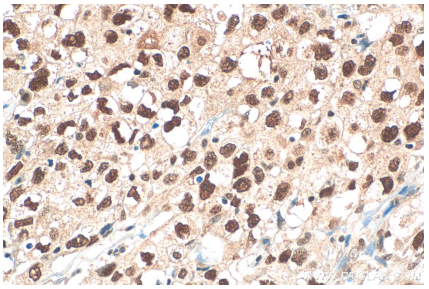


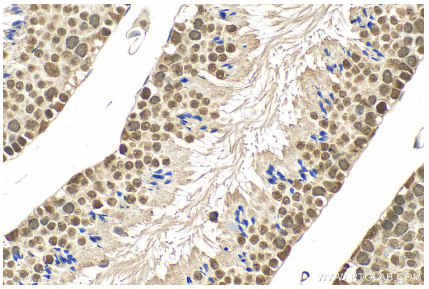
Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using PARP1 antibody (13371-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



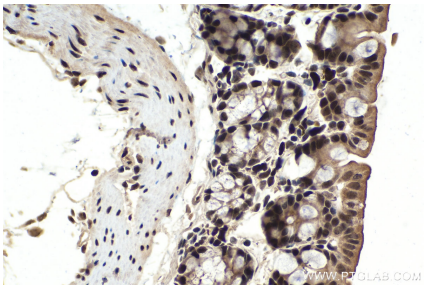
Immunofluorescent analysis of (-20°C Ethanol) fixed MCF-7 cells using PARP1 antibody (13371-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).





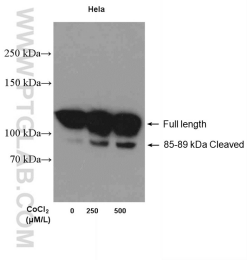


Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 13371-1-AP (PARP1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



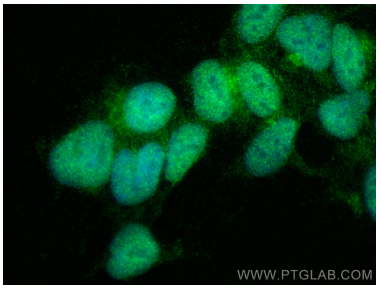
Immunohistochemical analysis of paraffin-embedded mouse colon tissue slide using 13371-1-AP (PARP1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).

Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 13371-1-AP (PARP1 antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Cobalt Chloride treated HeLa cells were subjected to SDS PAGE followed by western blot with 13371-1-AP (PARP1 Antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.

Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 13371-1-AP (PARP1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed HEK-293 cells using PARP1 antibody (13371-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).