

For Research Use Only

PARP1 Recombinant monoclonal antibody

Catalog Number: 80174-1-RR

Featured Product

6 Publications



Basic Information

Catalog Number:

80174-1-RR

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, 89 kDa

Purification Method:

Protein A purification

CloneNo.:

3N19

Recommended Dilutions:

WB: 1:5000-1:20000

IHC: 1:50-1:500

IF-P: 1:50-1:500

IF/ICC: 1:50-1:500

ChIP-qPCR: 1:10-1:100

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, ELISA, ChIP-qPCR

Cited Applications:

WB, IHC

Species Specificity:

human, mouse, rat

Cited Species:

human, rat

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: Jurkat cells, HEK-293 cells, HeLa cells, ROS1728 cells, HepG2 cells, RAW264.7 cells

IHC: human liver cancer tissue, mouse testis tissue

IF-P: mouse testis tissue,

IF/ICC: HepG2 cells, MCF-7 cells

ChIP-qPCR: HeLa 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
Yue Liu	35533849	Int J Biol Macromol	WB
Maria J Pires	40021124	J Biol Chem	WB
Hanxi Yu	39764971	J Hazard Mater	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:

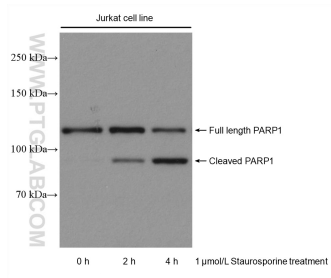
T: 4006900926

E: Proteintech-CN@ptglab.com

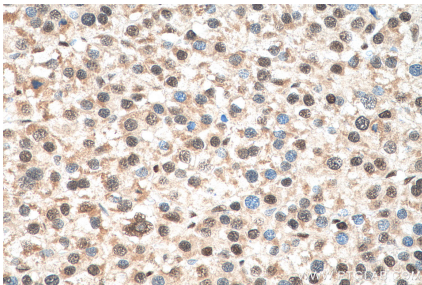
W: ptgcn.com

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

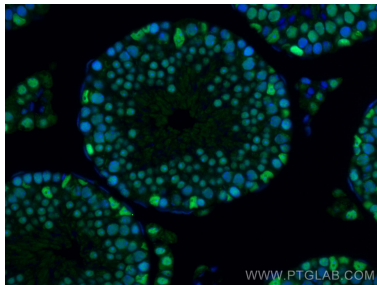
Selected Validation Data



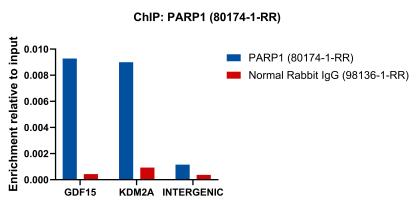
Jurkat cells treated with Staurosporin were subjected to SDS PAGE followed by western blot with 80174-1-RR (PARP1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



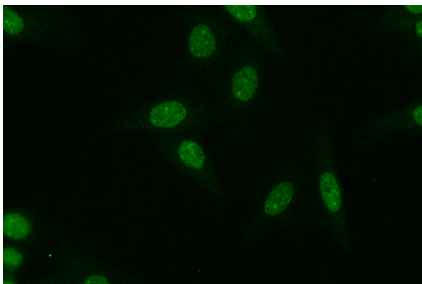
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 80174-1-RR (PARP1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



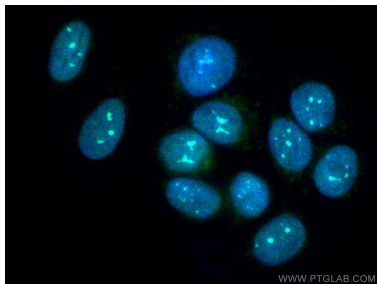
Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using PARP1 antibody (80174-1-RR, Clone: 3N19) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



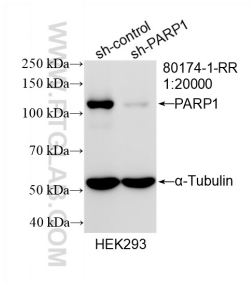
Chromatin was prepared from HeLa cells. Cells were fixed with formaldehyde for 10 minutes. The ChIP was performed with 20 μg of cross-linked chromatin, 5 μg of PARP1 (80174-1-RR) or 5 μg of Normal Rabbit IgG (98136-1-RR), and 20 μl of Protein A Magarose Beads. The immunoprecipitated DNA was quantified by real-time PCR.



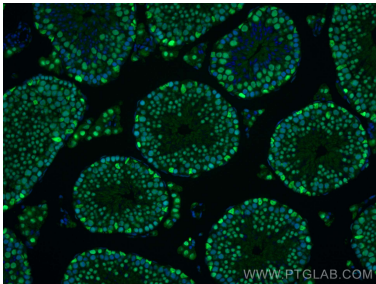
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using PARP1 antibody (80174-1-RR, Clone: 3N19) at dilution of 1:100 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



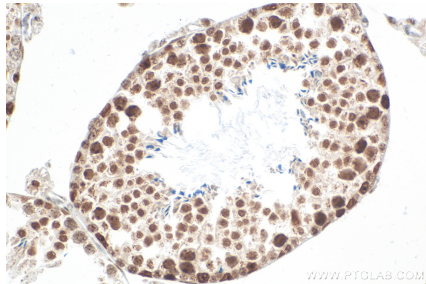
Immunofluorescent analysis of (-20°C Ethanol) fixed MCF-7 cells using PARP1 antibody (80174-1-RR, Clone: 3N19) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



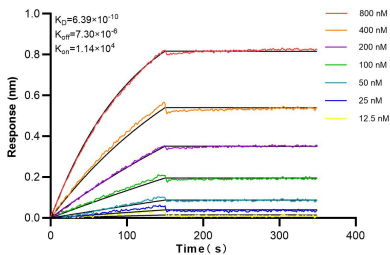
WB result of PARP1 antibody (80174-1-RR; 1:20000; incubated at room temperature for 1.5 hours) with sh-Control and sh-PARP1 transfected HEK-293 cells.



Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using PARP1 antibody (80174-1-RR, Clone: 3N19) 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 80174-1-RR (PARP1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 80174-1-RR against Human PARP1 were performed. The affinity constant is 0.639 nM.