For Research Use Only

PARP1 Recombinant antibody

Catalog Number:80174-1-RR 5 Publications



Basic Information

Catalog Number: GenBank Accession Number:

80174-1-RR BC037545
Size: GeneID (NCBI):

100ul , Concentration: 250 ug/ml by 142

Nanodrop; UNIPROT ID:
Source: P09874
Rabbit Full Name:

Isotype: poly (ADP-ribose) polymerase 1

IgG Calculated MW:
Immunogen Catalog Number: 1014 aa, 113 kDa
AG4193 Observed MW:

113-116, 89 kDa

Applications

Tested Applications:

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

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, HeLa cells, ROS1728 cells, HepG2

Purification Method:

Protein A purification

Recommended Dilutions:

WB 1:5000-1:20000

IHC 1:50-1:500

IF-P 1:50-1:500

IF/ICC 1:50-1:500

CloneNo.:

3N19

cells, RAW264.7 cells

IHC: human liver cancer tissue, mouse testis tissue

IF-P: mouse testis tissue, MCF-7 cells, HepG2 cells

IF/ICC: HepG2 cells, MCF-7 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
Hanxi Yu	39764971	J Hazard Mater	WB
Yanxia Guo	39729512	PLoS One	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

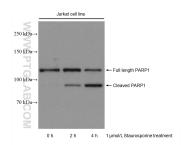
*** 20ul sizes contain 0.1% BSA

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

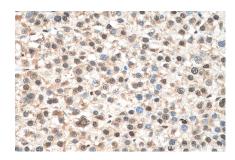
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

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.

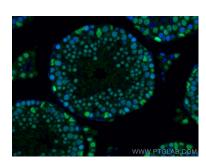
Selected Validation Data



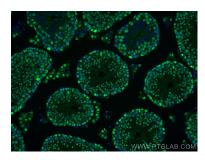
Jurkat cells treated with Staurosporin were subjected to SDS PAGE followed by western blot with 80174-1-RR (PARP1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours



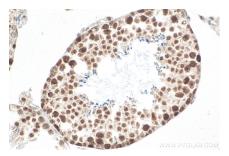
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 80174-1-RR (PARP1 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



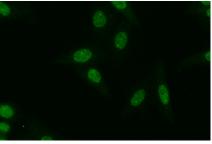
Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using PARP1 antibody (80174-1-RR, Clone: 3N19) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L).



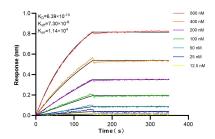
Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using PARP1 antibody (80174-1-RR, Clone: 3N19) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L).



Immunohistochemical analysis of paraffinembedded 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).



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 Goat Anti-Rabbit IgG(H+L).



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