

# PARP1 Recombinant antibody, PBS Only

Catalog Number: 80174-1-PBS

## Basic Information

<b>Catalog Number:</b> 80174-1-PBS	<b>GenBank Accession Number:</b> BC037545	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ug , Concentration: 1mg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 142	<b>CloneNo.:</b> 3N19
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P09874	
<b>Isotype:</b> IgG	<b>Full Name:</b> poly (ADP-ribose) polymerase 1	
<b>Immunogen Catalog Number:</b> AG4193	<b>Calculated MW:</b> 1014 aa, 113 kDa	
	<b>Observed MW:</b> 113-116, 89 kDa	

## Applications

**Tested Applications:**  
Indirect ELISA, IF-P, IHC, WB

**Species Specificity:**  
rat, mouse, human

## 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.

## Storage

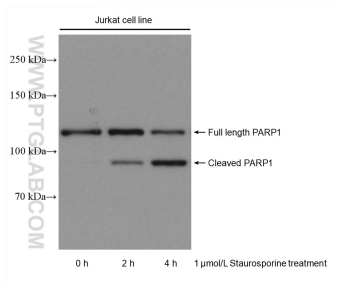
**Storage:**  
Store at -80°C.

**Storage Buffer:**  
PBS Only

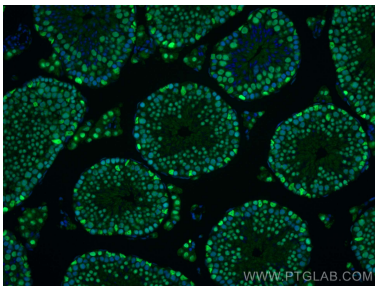
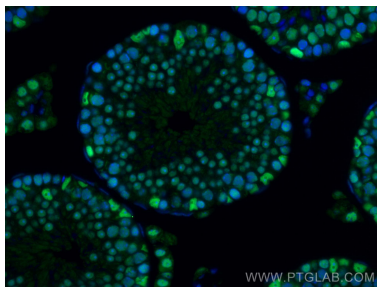
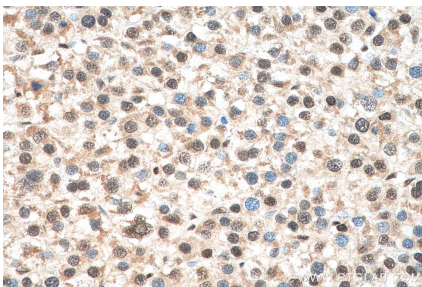
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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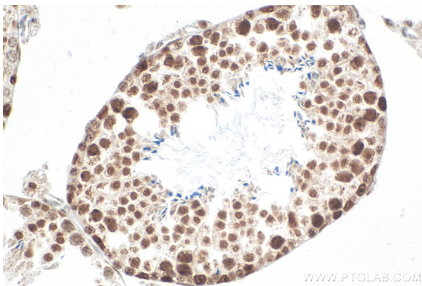
## Selected Validation Data



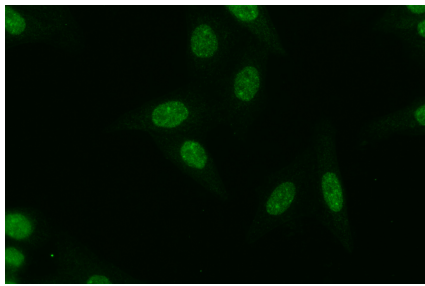
Jurkat cells treated with Staurosporin were subjected to SDS PAGE followed by western blot with 80174-1-RR (PARP1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80174-1-PBS in a different storage buffer formulation.



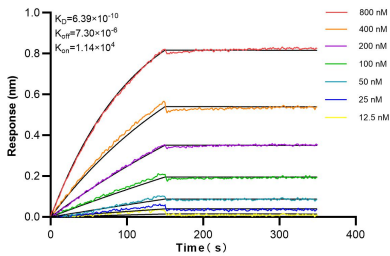
Immunofluorescent analysis of (4% PFA) fixed mouse testis tissue using PARP1 antibody (80174-1-RR, Clone: 3N19) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L). This data was developed using the same antibody clone with 80174-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 80174-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 80174-1-PBS in a different storage buffer formulation.



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