

# Summary

Production Name	Cleaved-PARP-1 (D214) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	WB,IHC,IF,ELISA
Reactivity	Human,Mouse

#### Performance

Conjugation	Unconjugated
Modification	Unmodified
lsotype	lgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw
	cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

#### Immunogen

Gene Name	PARP1
	PARP1; ADPRT; PPOL; Poly [ADP-ribose] polymerase 1; PARP-1; ADP-ribosyltransferase
Alternative Names	diphtheria toxin-like 1; ARTD1; NAD(+) ADP-ribosyltransferase 1; ADPRT 1; Poly[ADP-
	ribose] synthase 1
Gene ID	142.0
SwissProt ID	P09874.The antiserum was produced against synthesized peptide derived from human
	PARP. AA range:165-214

# Application

<b>Dilution Ratio</b>	WB 1:500-2000, IF 1:50-300, IHC 1:50-300
Molecular Weight	24kD



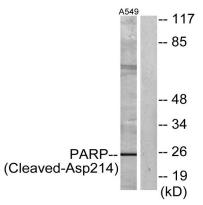
## Background

This gene encodes a chromatin-associated enzyme, poly(ADP-ribosyl)transferase, which modifies various nuclear proteins by poly(ADP-ribosyl)ation. The modification is dependent on DNA and is involved in the regulation of various important cellular processes such as differentiation, proliferation, and tumor transformation and also in the regulation of the molecular events involved in the recovery of cell from DNA damage. In addition, this enzyme may be the site of mutation in Fanconi anemia, and may participate in the pathophysiology of type I diabetes. [provided by RefSeq, Jul 2008], catalytic activity:NAD(+) + (ADP-D-ribosyl)(n)-acceptor = nicotinamide + (ADP-D-ribosyl)(n+1)-acceptor, function:Involved in thebase excision repair (BER) pathway, by catalyzing the poly(ADP-ribosyl)ation of a limited number of acceptor proteins involved in chromatin architecture and in DNA metabolism. This modification follows DNA damages and appears as an obligatory step in a detection/signaling pathway leading to the reparation of DNA strand breaks.,miscellaneous:The ADP-D-ribosyl group of NAD(+) is transferred to an acceptor carboxyl group on a histone or the enzyme itself, and further ADPribosyl groups are transferred to the 2'-position of the terminal adenosine moiety, building up a polymer with an average chain length of 20-30 units., PTM: Phosphorylated by PRKDC. Phosphorylated upon DNA damage, probably by ATM or ATR., PTM: Poly-ADP-ribosylated by PARP2., similarity: Contains 1 BRCT domain., similarity: Contains 1 PARP alpha-helical domain.,similarity:Contains 1 PARP catalytic domain.,similarity:Contains 2 PARP-type zinc fingers.,subunit:Component of a base excision repair (BER) complex, containing at least XRCC1, PARP2, POLB and LIG3. Homo- and heterodimer with PARP2. Interacts with PARP3, APTX and SRY. The SWAP complex consists of NPM1, NCL, PARP1 and SWAP70. Interacts with TIAM2 and ZNF423.,

## **Research Area**

Base excision repair;

## Image Data

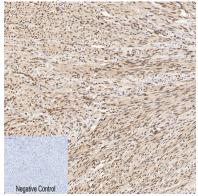


Western blot analysis of lysates from A549 cells, treated with etoposide 25uM 24h, using PARP (Cleaved-Asp214)

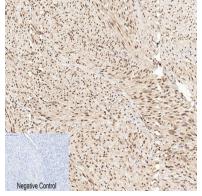
## Product Name: Cleaved-PARP-1 (D214) Rabbit Polyclonal Antibody Catalog #: APRab09025



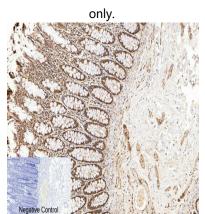
Antibody. The lane on the right is blocked with the synthesized peptide.



Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,Cleaved-PARP-1 (D214) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1,Cleaved-PARP-1 (D214) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody

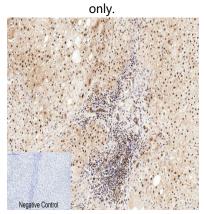


Immunohistochemical analysis of paraffin-embedded Human-colon-cancer tissue. 1,Cleaved-PARP-1 (D214) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) .

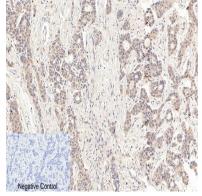
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3, Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody



Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1,Cleaved-PARP-1 (D214) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.



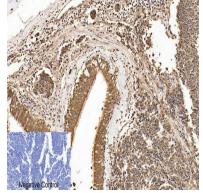
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,Cleaved-PARP-1 (D214) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody



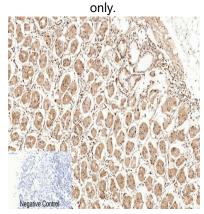
Immunohistochemical analysis of paraffin-embedded Human-lung tissue. 1, Cleaved-PARP-1 (D214) Polyclonal Antibody



was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Human-lung-cancer tissue. 1,Cleaved-PARP-1 (D214) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody



Immunohistochemical analysis of paraffin-embedded Human-stomach tissue. 1,Cleaved-PARP-1 (D214) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.

#### Note

For research use only.