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

For research use only.

**Summary**

<b>Description</b>	Rabbit polyclonal Antibody
<b>Host</b>	Rabbit
<b>Application</b>	WB,IHC,ICC/IF
<b>Reactivity</b>	Human,Mouse
<b>Conjugation</b>	Unconjugated
<b>Modification</b>	Unmodified
<b>Isotype</b>	IgG
<b>Clonality</b>	Polyclonal
<b>Form</b>	Liquid
<b>Concentration</b>	1mg/ml
<b>Storage</b>	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
<b>Shipping</b>	Ice bags
<b>Buffer</b>	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
<b>Purification</b>	Affinity purification

**Application**

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

**Antigen Information**

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

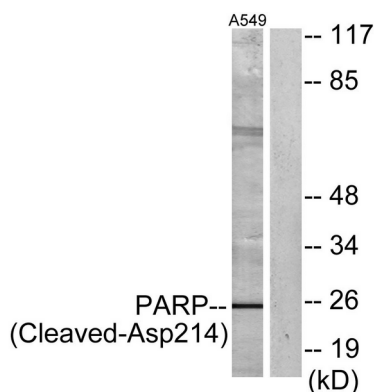
## Background

This gene encodes a chromatin-associated enzyme, poly(ADP-ribose)transferase, which modifies various nuclear proteins by poly(ADP-ribose)ylation. 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-ribose)(n)-acceptor = nicotinamide + (ADP-D-ribose)(n+1)-acceptor.,function:Involved in the base excision repair (BER) pathway, by catalyzing the poly(ADP-ribose)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-ribose group of NAD(+) is transferred to an acceptor carboxyl group on a histone or the enzyme itself, and further ADP-ribose 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.,

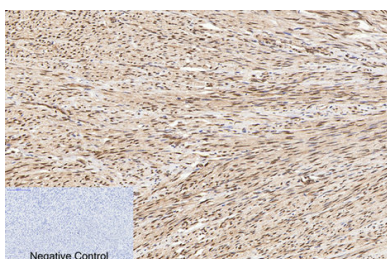
## Research Area

Base excision repair;

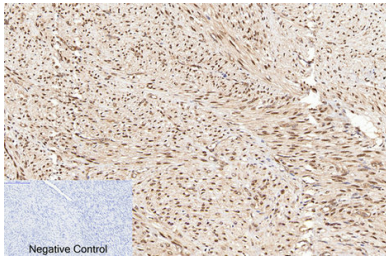
## Image Data



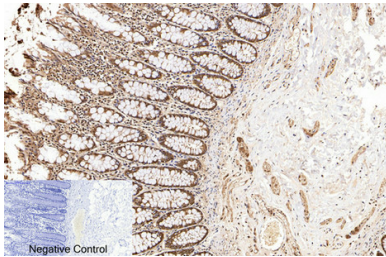
Western blot analysis of lysates from A549 cells, treated with etoposide 25uM 24h, using PARP (Cleaved-Asp214) Antibody. The lane on the right is blocked with the synthesized peptide.



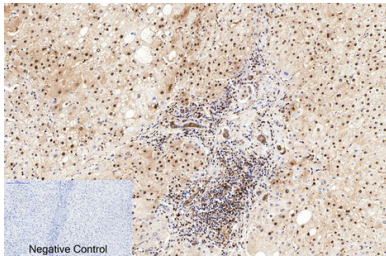
Immunohistochemical analysis of paraffin-embedded Human-uterus tissue. 1,Cleaved-PARP-1 ( D214 ) Polyclonal Antibody was diluted at 1:200 ( 4°C,overnight ) . 2, Sodium citrate pH 6.0 was used for antibody retrieval ( >98°C,20min ) . 3,Secondary antibody was diluted at 1:200 ( room temperature, 30min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



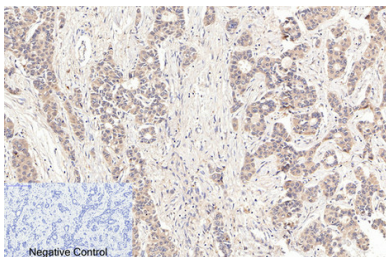
Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1,Cleaved-PARP-1 ( D214 ) Polyclonal Antibody was diluted at 1:200 ( 4°C,overnight ) . 2, Sodium citrate pH 6.0 was used for antibody retrieval ( >98°C,20min ) . 3,Secondary antibody was diluted at 1:200 ( room temperature,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



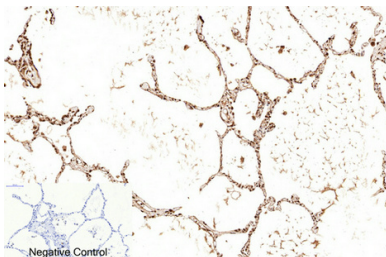
Immunohistochemical analysis of paraffin-embedded Human-colon-cancer tissue. 1,Cleaved-PARP-1 ( D214 ) Polyclonal Antibody was diluted at 1:200 ( 4°C,overnight ) . 2, Sodium citrate pH 6.0 was used for antibody retrieval ( >98°C,20min ) . 3,Secondary antibody was diluted at 1:200 ( room temperature,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



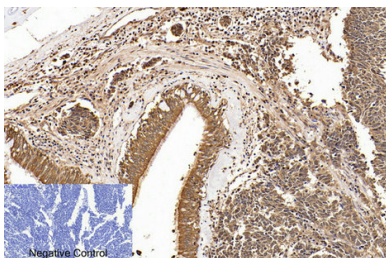
Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1,Cleaved-PARP-1 ( D214 ) Polyclonal Antibody was diluted at 1:200 ( 4°C,overnight ) . 2, Sodium citrate pH 6.0 was used for antibody retrieval ( >98°C,20min ) . 3,Secondary antibody was diluted at 1:200 ( room temperature, 30min )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



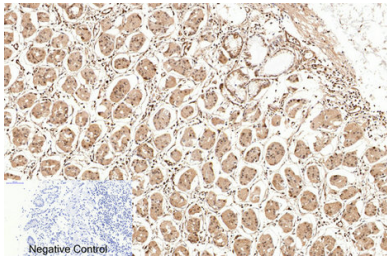
Immunohistochemical analysis of paraffin-embedded Human-liver-cancer tissue. 1,Cleaved-PARP-1 ( D214 ) Polyclonal Antibody was diluted at 1:200 ( 4°C,overnight ) . 2, Sodium citrate pH 6.0 was used for antibody retrieval ( >98°C,20min ) . 3,Secondary antibody was diluted at 1:200 ( room temperature,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



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 only.



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.