Product Name: **Cleaved PARP(Mix)Mouse Monoclonal Antibody**
Catalog #: **AMM08946**
For research use only.

Summary

Description	Mouse monoclonal Antibody
Host	Mouse
Application	WB,IHC,ICC/IF
Reactivity	Human
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Monoclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	PBS, pH 7.4, containing 0.5%protective protein, 0.02% New type preservative N as Preservative and 50% Glycerol.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:2000-1:5000,IHC 1:50-1:300,ICC/IF 1:50-1:200
Molecular Weight	116,89kDa

Antigen Information

Gene Name	PARP1
Alternative Names	PARP1; ADPRT; PPOL; Poly [ADP-ribose] polymerase 1; PARP-1; ADP-ribosyltransferase diphtheria toxin-like 1; ARTD1; NAD(+) ADP-ribosyltransferase 1; ADPRT 1; Poly[ADP-ribose] synthase 1
Gene ID	142.0
SwissProt ID	P09874
Immunogen	Synthetic Peptide of Cleaved PARP

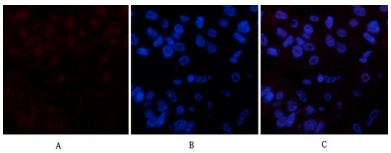
Background

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 the base 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 ADP-ribosyl 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.,

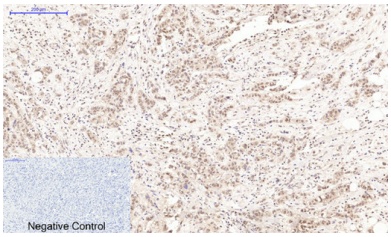
Research Area

Base excision repair;

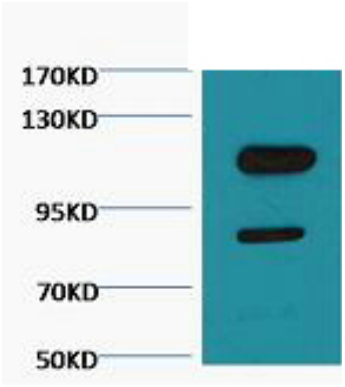
Image Data



Immunofluorescence analysis of human-liver-cancer tissue. 1,Cleaved PARP Monoclonal Antibody (Mix) (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunohistochemical analysis of paraffin-embedded Human-breast-cancer tissue. 1,Cleaved PARP Monoclonal Antibody (Mix) 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.



Western blot analysis of Jurkat, diluted at 1:3000. cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit （SC-003,Inventbiotech,MN,USA）.