



Cleaved PARP Monoclonal Antibody(Mix)

Catalog No	YP-Ab-00118
Isotype	IgG
Reactivity	Human
Applications	IF;WB;IHC;
Gene Name	PARP1
Immunogen	Synthetic Peptide of Cleaved PARP
Specificity	The antibody detects endogenous pro and active PARP protein.
Formulation	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
Source	Monoclonal, Mouse
Purification	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Dilution	IF: 1:50-200 WB: 1:2000-5000 IHC 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PARP;PARS;PPOL;ADPRT;ARTD1;ADPRT1;PARP-1;ADPRT 1;pADPRT-1; Poly-PARP;PARP1;Poly [ADP-ribose] polymerase 1;ADP-ribosyltransferase diphtheria toxin-like 1;NAD(+) ADP-ribosyltransferase 1;Poly[ADP-ribose] synthase 1
Observed Band	116,89kD
Calculated Molecular Weight	116,89kD
Cell Pathway	Nucleus . Nucleus, nucleolus . Chromosome . Localizes to sites of DNA damage. .
Tissue Specificity	Brain,Colon carcinoma,Fibroblast,Lung,Ovarian carcinoma,Skin,
Function	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

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],

matters needing attention

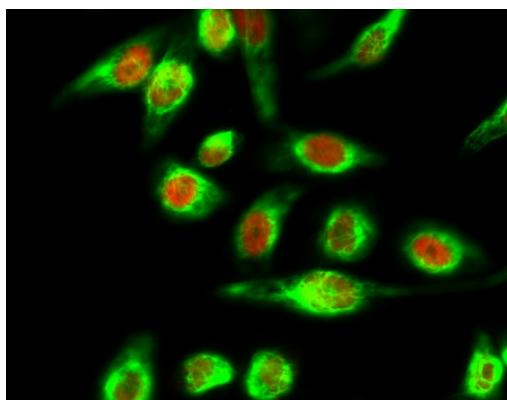
Avoid repeated freezing and thawing!

Usage suggestions

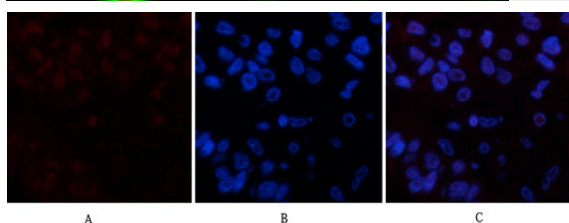
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



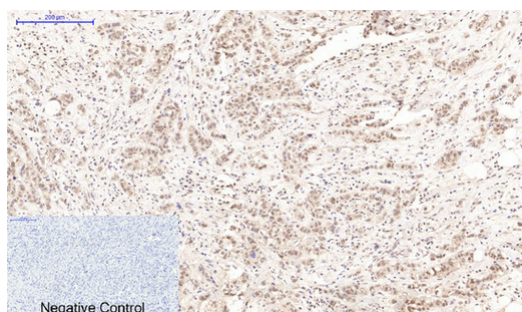
Products Images



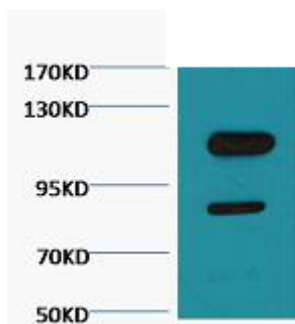
Immunofluorescence analysis of HeLa cell. 1, BRCA1 Polyclonal Antibody (green) was diluted at 1:200 (4° overnight). (red) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 488 Catalog: RS3211 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 594 Catalog: RS3608 was diluted at 1:1000 (room temperature, 50min).



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