



Cleaved-PARP-1 (D214) Polyclonal Antibody

Catalog No	YP-Ab-00028
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	PARP1
Protein Name	Poly [ADP-ribose] polymerase 1
Immunogen	The antiserum was produced against synthesized peptide derived from human PARP. AA range:165-214
Specificity	Cleaved-PARP-1 (D214) Polyclonal Antibody detects endogenous levels of fragment of activated PARP-1 protein resulting from cleavage adjacent to D214.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000, IF 1:50-300, IHC 1:50-300
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	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
Observed Band	24kD
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-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



Background

This gene encodes a chromatin-associated enzyme, poly(ADP-ribose)transferase, which modifies various nuclear proteins by poly(ADP-ribose)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

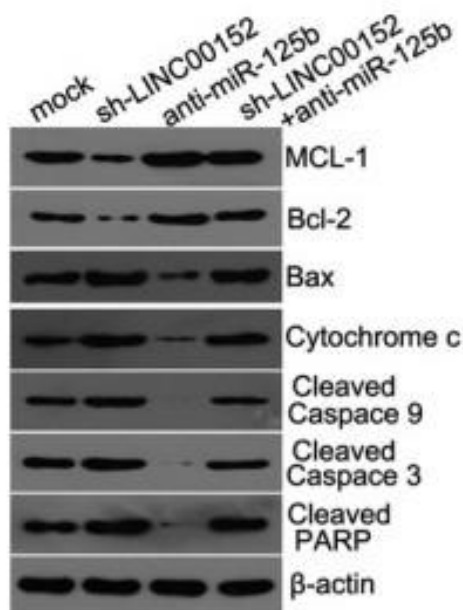
Avoid repeated freezing and thawing!

Usage suggestions

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

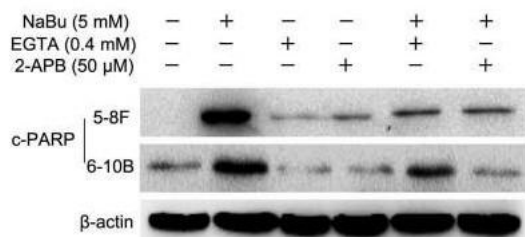
Products Images

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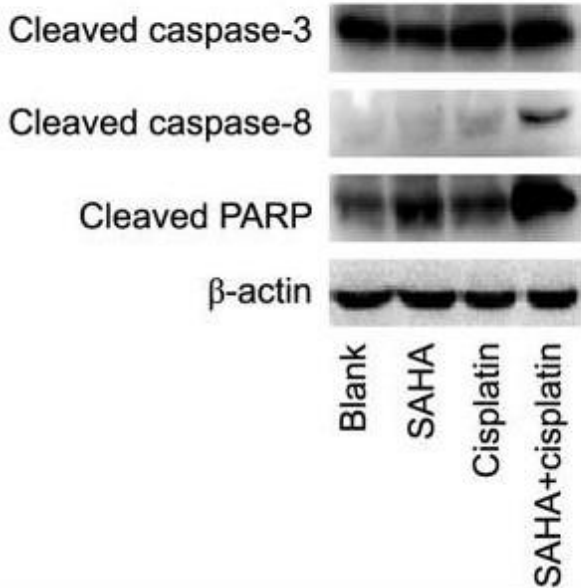


Chen, Puxiang, et al. "Long noncoding RNA LINC00152 promotes cell proliferation through competitively binding endogenous miR - 125b with MCL - 1 by regulating mitochondrial apoptosis pathways in ovarian cancer." *Cancer medicine* 7.9 (2018): 4530-4541.

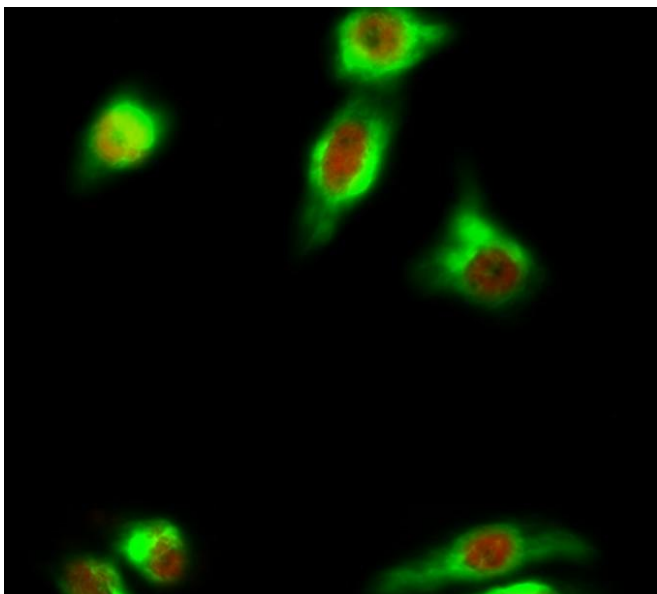
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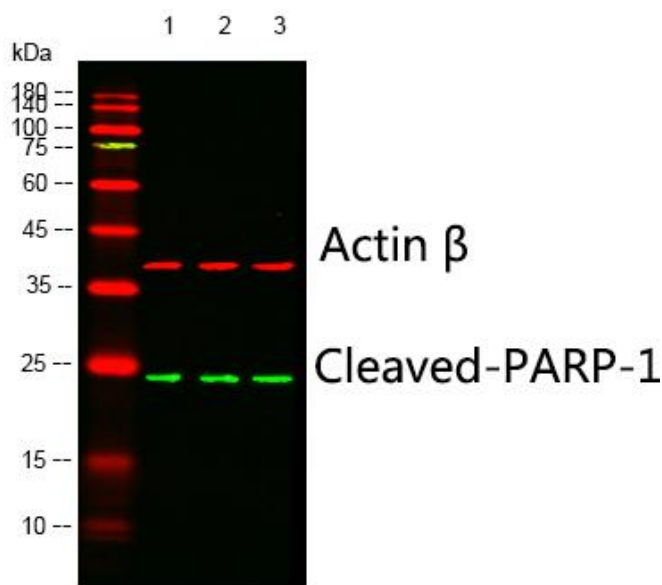
Huang, Wei, et al. "Inhibition of store-operated Ca²⁺ entry counteracts the apoptosis of nasopharyngeal carcinoma cells induced by sodium butyrate." *Oncology letters* 13.2 (2017): 921-929.



Hou, Mengyi, et al. "Synergistic antitumor effect of suberoylanilide hydroxamic acid and cisplatin in osteosarcoma cells." *Oncology letters* 16.4 (2018): 4663-4670.



Immunofluorescence analysis of HeLa cell. 1, Cleaved-PARP-1 (D214) Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). LC3B Polyclonal Antibody (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog: RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog: RS3208 was diluted at 1:1000 (room temperature, 50min).



Western blot analysis of lysates from UV treated: 1) MCF-7, 2) 293T, 3) HELA cells. (Green) primary antibody was diluted at 1:1000, 4° over night, Dylight 800 secondary antibody (Immunoway: RS23920) was diluted at 1:10000, 37° 1hour. (Red) Actin β Monoclonal Antibody (5B7) (Immunoway: YM3028) antibody was diluted at 1:5000 as loading control, 4° over night, Dylight 680 secondary antibody (Immunoway: RS23710) was diluted at 1:10000, 37° 1hour.