



# PARP-1 Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-10859
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human; Mouse; Rat
<b>Applications</b>	IHC;IF;WB
<b>Gene Name</b>	PARP1 ADPRT PPOL
<b>Protein Name</b>	PARP-1
<b>Immunogen</b>	Synthesized peptide derived from human PARP-1. AA range: 410-460
<b>Specificity</b>	This antibody detects endogenous levels of human PARP-1
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit serum by affinity-chromatography using specific immunogen.
<b>Dilution</b>	IHC-p 1:50-200, WB 1:500-2000. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	Poly [ADP-ribose] polymerase 1 (PARP-1;EC 2.4.2.30;ADP-ribosyltransferase diphtheria toxin-like 1;ARTD1;NAD(+) ADP-ribosyltransferase 1;ADPRT 1;Poly[ADP-ribose] synthase 1)
<b>Observed Band</b>	113kD
<b>Cell Pathway</b>	Nucleus . Nucleus, nucleolus . Chromosome . Localizes to sites of DNA damage. .
<b>Tissue Specificity</b>	Brain,Colon carcinoma,Fibroblast,Lung,Ovarian carcinoma,Skin,
<b>Function</b>	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-ribosylation) 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-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],

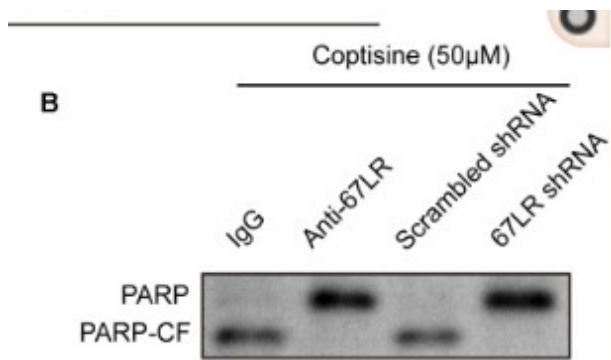
## matters needing attention

Avoid repeated freezing and thawing!

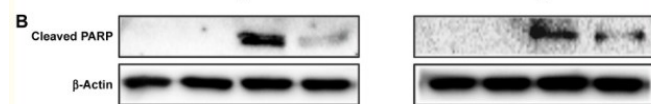
## Usage suggestions

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

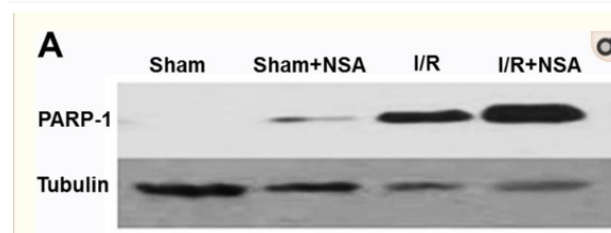
## Products Images



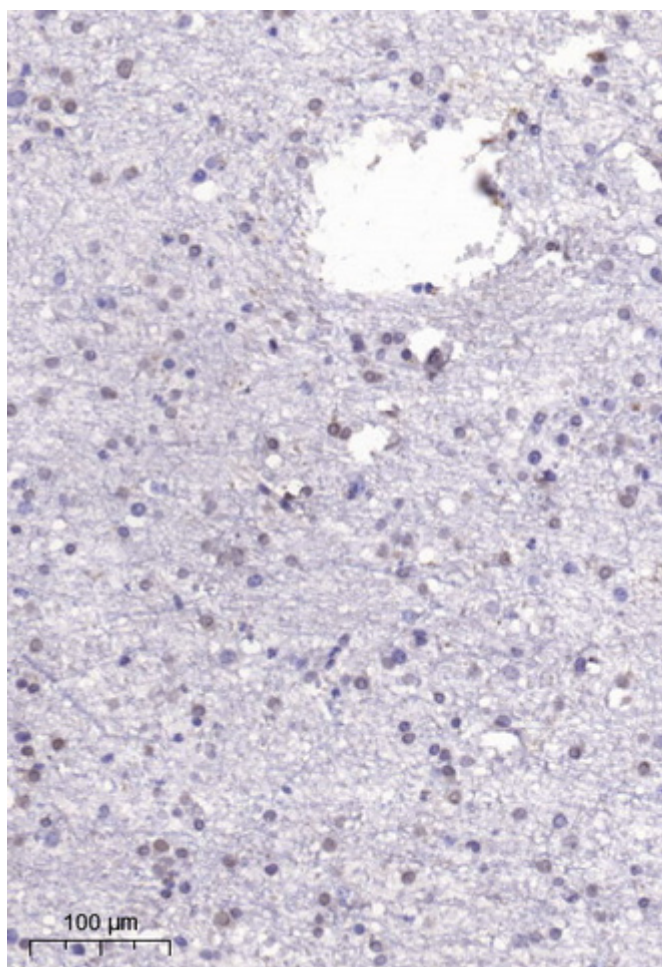
Zhou, Li, et al. "Coptisine induces apoptosis in human hepatoma cells through activating 67-kDa laminin receptor/cGMP signaling." *Frontiers in pharmacology* 9 (2018).



Yao, Chong, et al. "Crocin induces autophagic apoptosis in hepatocellular carcinoma by inhibiting Akt/mTOR activity." *OncoTargets and therapy* 11 (2018): 2017.



Zhou, Yanlong, et al. "The degradation of mixed lineage kinase domain-like protein promotes neuroprotection after ischemic brain injury." *Oncotarget* 8.40 (2017): 68393.



Immunohistochemical analysis of paraffin-embedded human brain. 1, Tris-EDTA, pH9.0 was used for antigen retrieval. 2 Antibody was diluted at 1:200 (4° overnight). 3, Secondary antibody was diluted at 1:200 (room temperature, 45min).