



PARP-1 Monoclonal Antibody

Catalog No	YP-Ab-00081
Isotype	IgG
Reactivity	Human
Applications	WB;FCM;ELISA
Gene Name	PARP1
Protein Name	Poly [ADP-ribose] polymerase 1
Immunogen	Synthetic peptide of human PARP-1, conjugated to KLH.
Specificity	PARP-1 Monoclonal Antibody detects endogenous levels of PARP-1 protein.
Formulation	Ascitic fluid containing 0.03% sodium azide,0.5% BSA, 50%glycerol.
Source	Monoclonal, Mouse
Purification	Affinity purification
Dilution	Western Blot: 1/500 - 1/2000. Flow cytometry: 1/200 - 1/400. ELISA: 1/10000. Not yet tested in other applications.
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	
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-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-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],

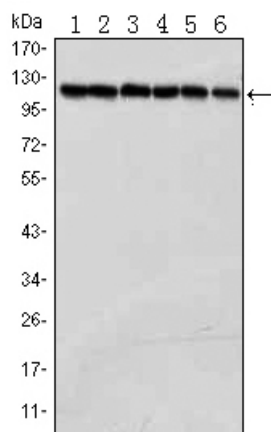
matters needing attention

Avoid repeated freezing and thawing!

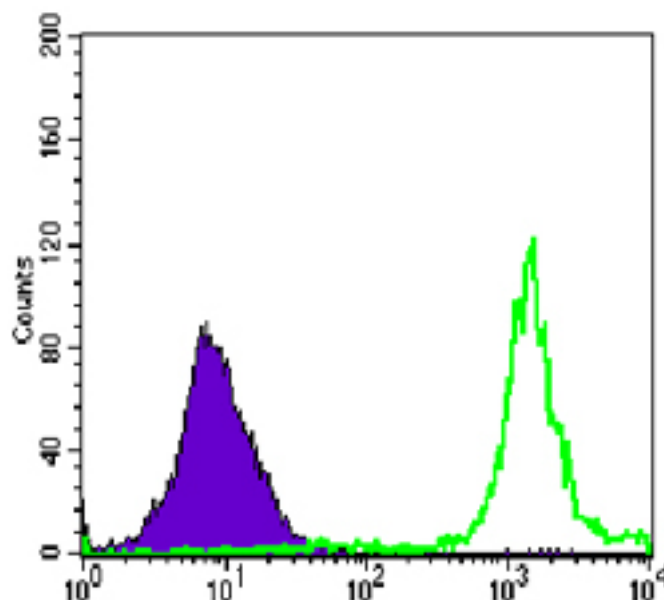
Usage suggestions

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

Products Images



Western Blot analysis using PARP-1 Monoclonal Antibody against Jurkat (1), K562 (2), HeLa (3), Raji (4), THP-1 (5) and SW620 (6) cell lysate.



Flow cytometric analysis of Jurkat cells using PARP-1 Monoclonal Antibody (green) and negative control (purple).