

PARP-1 Monoclonal Antibody

Catalog No :	YM0506
Reactivity :	Human
Applications :	WB;FCM;ELISA
Target :	PARP
Fields :	>>Base excision repair;>>NF-kappa B signaling pathway;>>Apoptosis;>>Necroptosis;>>Diabetic cardiomyopathy
Gene Name :	PARP1
Protein Name :	Poly [ADP-ribose] polymerase 1
Human Gene Id :	142
Human Swiss Prot No :	P09874
Mouse Swiss Prot No :	P11103
Immunogen :	Synthetic peptide of human PARP-1, conjugated to KLH.
Specificity :	PARP-1 Monoclonal Antibody detects endogenous levels of PARP-1 protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Monoclonal, Mouse
Dilution :	WB 1:500 - 1:2000. Flow cytometry: 1:200 - 1:400. ELISA: 1:10000. Not yet tested in other applications.
Purification :	Affinity purification
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Molecularweight :	113kD

Cell Pathway : Base excision repair;

P References : 1. Cytogenet Cell Genet. 1992;61(3):172-4.
2. J Immunol. 1997 Dec 1;159(11):5246-52.
3. J Biol Chem. 2001 Dec 7;276(49):45588-97.

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],

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-riboseylated by PARP2.,similarity:Contains 1 BRCT

Subcellular Location : Nucleus . Nucleus, nucleolus . Chromosome . Localizes to sites of DNA damage.

Expression : Brain,Colon carcinoma,Fibroblast,Lung,Ovarian carcinoma,Skin,

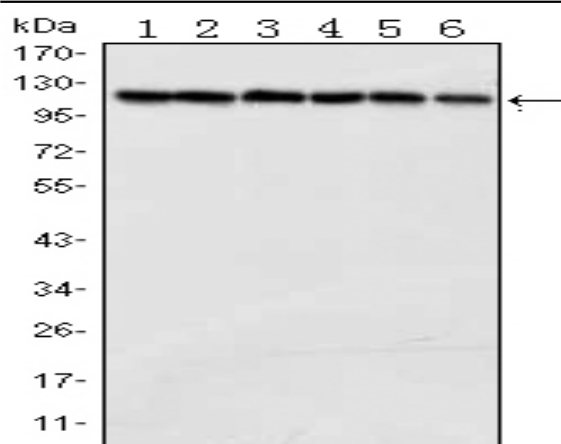
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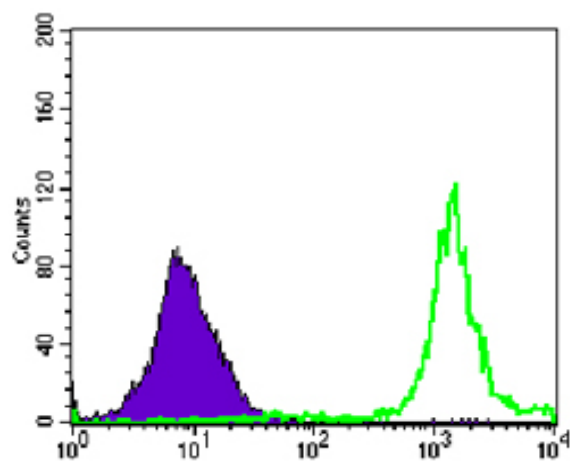
Host : Mouse

Modifications : Unmodified

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).