

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

P11103

Human Gene Id: 142

Human Swiss Prot P09874

No:

Mouse Swiss Prot

No:

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

1/3

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-

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],

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

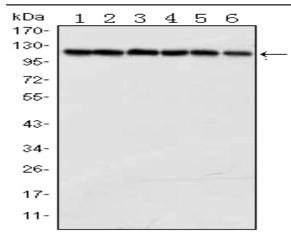
Subcellular Location:

Nucleus . Nucleus, nucleolus . Chromosome . Localizes to sites of DNA damage.

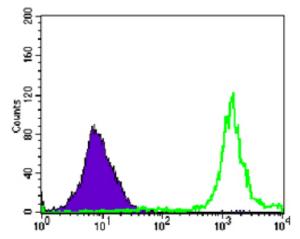
Expression:

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

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).