
Product Name: PARP-1 (Acetyl-K521) Rabbit Polyclonal Antibody**Catalog #: APRab06249**

For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB
Reactivity	Human, Mouse, Rat
Conjugation	Unconjugated
Modification	Acetylated
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio WB 1:500-1:2000

Molecular Weight

Antigen Information

Gene Name	PARP1 ADPRT PPOL 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)
Alternative Names	
Gene ID	142.0
SwissProt ID	P09874
Immunogen	Synthesized Acetyl peptide derived from human PARP-1. at AA range: K521

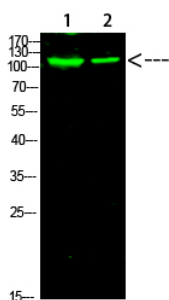
Background

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],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 domain.,similarity:Contains 1 PARP alpha-helical domain.,similarity:Contains 1 PARP catalytic domain.,similarity:Contains 2 PARP-type zinc fingers.,subunit:Component of a base excision repair (BER) complex, containing at least XRCC1, PARP2, POLB and LIG3. Homo- and heterodimer with PARP2. Interacts with PARP3, APTX and SRY. The SWAP complex consists of NPM1, NCL, PARP1 and SWAP70. Interacts with TIAM2 and ZNF423.,

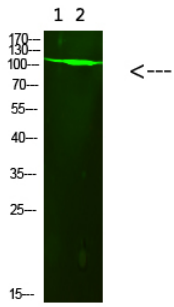
Research Area

Base excision repair;

Image Data



Western Blot analysis of 1,mouse-heart 2,mouse-brain cells using PARP-1 (Acetyl-K521) Rabbit Polyclonal Antibody diluted at 1:1000 (4°C overnight) . Secondary antibody: Goat Anti-rabbit IgG IRDye 800 (diluted at 1:5000, 25°C, 1 hour)



Western Blot analysis of 1,293t 2, mouse-brain cells using PARP-1 (Acetyl-K521) Rabbit Polyclonal Antibody diluted at 1:1000 (4°C overnight) . Secondary antibody : Goat Anti-rabbit IgG IRDye 800 (diluted at 1:5000, 25°C, 1 hour)