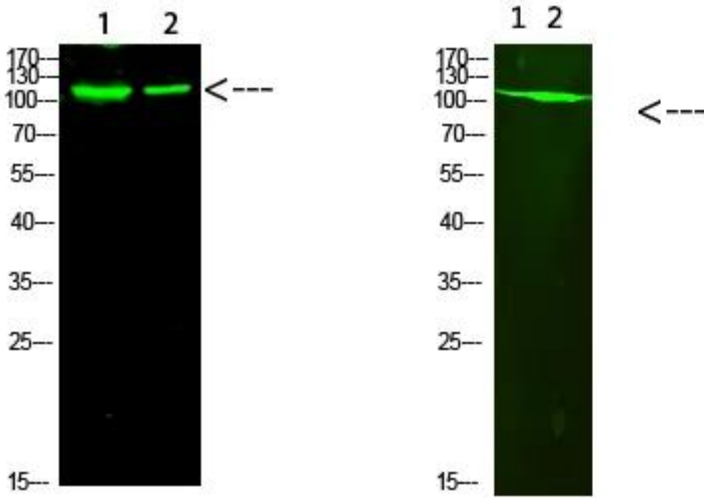


Product name:	PARP-1 (Acetyl-K521) Rabbit Polyclonal Antibody
Cat number:	ABN06249
Conjugate:	Unconjugated
Size:	100µL
Clone:	POLY
Concentration:	1mg/ml
Host:	Rabbit
Isotype:	IgG
Immunogen:	Synthesized Acetyl peptide derived from human PARP-1. at AA range: K521
Reactivity:	Human,Mouse,Rat
Applications:	WB 1:500-1:2000
Purification:	Affinity purification
Form:	liquid
Buffer:	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

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.,



Western Blot analysis of 1,mouse-heart 2,mouse-brain cells using PARP-1 (AcetylK521) Rabbit Polyclonal Antibody diluted at 1:1000 at 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 at 4°C overnight. Secondary antibody: Goat Anti-rabbit IgG IRDye 800 (diluted at 1:5000, 25°C, 1 hour).