Datasheet for ABIN7197450

# PARP1 Protein (His tag)

Go to Product page

## Overview

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| Quantity: | 50 µg |
| Target: | PARP1 |
| Origin: | Human |
| Source: | Baculovirus infected Insect Cells |
| Protein Type: | Recombinant |
| Biological Activity: | Active |
| Purification tag / Conjugate: | This PARP1 protein is labelled with His tag. |

## Product Details

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| Purpose: | Recombinant Human PARP-1 Protein (His Tag)(Active) |
| Sequence: | Met 1-Trp 1014 |
| Characteristics: | The amino acids corresponding to the full length of human PARP1 (NP_001609.2) (Met 1-Trp 1014) was fused with a polyhistidine tag at the C-terminus. |
| Purity: | > 90 % as determined by reducing SDS-PAGE. |
| Endotoxin Level: | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Biological Activity Comment: | 1.Measured by its binding ability in a functional ELISA. 2. Immobilized human PARP1 at 10 µg/mL (100 µl/well) can bind biotinylated human HSP70, The EC50 of biotinylated human HSP70 is 0.035 µg/mL. |

## Target Details

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| Target: | PARP1 |

## Target Details

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| Alternative Name: | PARP-1 (PARP1 Products) |
| Background: | Background: Poly (ADP-ribose) polymerase 1(PRAP1), also known as NAD(+) ADP-ribosyltransferase 1(ADPRT), is a chromatin-associated enzyme which modifies various nuclear proteins by poly(ADP-ribosyl)ation. 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. The poly(ADP-ribosyl)ation modification is critical for a wide range of processes, including DNA repair, regulation of chromosome structure, transcriptional regulation, mitosis and apoptosis. PARP1 is demonstrateed to mediate the poly(ADP-ribose) ation of APLF (aprataxin PNK-like factor) and CHFR (checkpoint protein with FHA and RING domains), two representative proteins involved in the DNA damage response and checkpoint regulation. Further, It has been suggested that DNA-dependent protein kinase (DNA-PK), another component of DNA repair, suppresses PARP activity, probably through direct binding and/or sequestration of DNA-ends which serve as an important stimulator for both enzymes. PARP1 inhibitors is thus proposed as a targeted cancer therapy for recombination deficient cancers, such as BRCA2 tumors.<br>Synonym: ADPRT,ADPRT1,ARTD1,pADPRT-1,PARP,PARP-1,PPOL |
| Molecular Weight: | 114.5 kDa |
| NCBI Accession: | NP_001609 |
| Pathways: | Apoptosis, Caspase Cascade in Apoptosis, DNA Damage Repair, Production of Molecular Mediator of Immune Response, Maintenance of Protein Location |

## Application Details

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| Restrictions: | For Research Use only |

## Handling

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| Format: | Lyophilized |
| Reconstitution: | Please refer to the printed manual for detailed information. |
| Buffer: | Lyophilized from sterile PBS, pH 7.4 |
| Storage: | 4 °C,-20 °C,-80 °C |
| Storage Comment: | Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted |

samples are stable at < -20°C for 3 months.