# Recombinant human PARP protein

Catalog Number: ATGP0469

## PRODUCT INFORMATION

**Expression system**
E.coli

**Domain**
662-1014aa

**UniProt No.**
P09874

**NCBI Accession No.**
AAH37545.1

**Alternative Names**
Poly (ADP-ribose) polymerase family member 1, ADPRT, ADPRT1, pADPRT, pADPRT-1, PARP, PARP-1, PPOL, Poly (ADP-ribose) polymerase family, member 1 ADP ribosyltransferase (NAD+, poly (ADP ribose) polymerase), ADPRT 1, msPARP, NAD(+) ADP ribosyltransferase 1, pADPRT 1, PARP 1, PARP1, Poly (ADP ribose) polymerase 1, poly(ADP ribose) synthetase, poly(ADP ribosyl)transferase, Poly[ADP ribose] synthetase 1, sPARP 1, sPARP1.

## PRODUCT SPECIFICATION

**Molecular Weight**
39.6 kDa (354aa) confirmed by MALDI-TOF

**Concentration**
1mg/ml (determined by Bradford assay)

**Formulation**
Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol 1mM DTT

**Purity**
> 95% by SDS-PAGE

**Tag**
Non-Tagged

**Application**
SDS-PAGE

**Storage Condition**
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

**Description**
PARP1 is a nuclear DNA-binding zinc finger protein which can exist as a homo- or hetero-dimer, and is strongly activated by DNA strand breaks. This protein involved in chromatin architecture and DNA metabolism, and participates in protein modification to enhance or repress transcription. PARP1 also plays a role in other cellular

processes, including cell proliferation and differentiation. PARP-1 deficiencies lead to chromosomal instability due to higher frequencies of chromosome fusions and aneuploidy, suggesting that poly (ADPribosyl) ation contributes to the efficient maintenance of genome integrity. Recombinant PARP1 protein was expressed in E. coli and purified by using conventional chromatography techniques.

### Amino acid Sequence

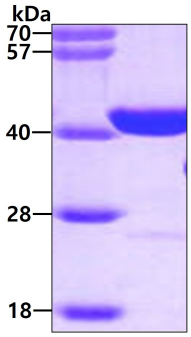
MKSKLPKPVQ DLIKMIFDVE SMKKAMVEYE IDLQKMPLGK LSKRQIQAAY SILSEVQQAV SQGSSDSQIL DLSNRFYTLI PHDFGMKKPP LLNNADSVQA KAEMLDNLLD IEVAYSLLRG GSDDSSKDPI DVNYEKLKTD IKVVDRDSEE AEIIRKYVKN THATTHNAYD LEVIDIFKIE REGECQRYKP FKQLHNRRLL WHGSRTTNFA GILSQGLRIA PPEAPVTGYM FGKGIYFADM VSKSANYCHT SQGDPIGLIL LGEVALGNMY ELKHASHISK LPKGKHSVKG LGKTTPDPSA NISLDGVDVP LGTGISSGVN DTSLLYNEYI VYDIAQVNLK YLLKLKFNFK TSLW

### General References

Dantzer F., et al. (1998) Nucleic Acids Res. 26(8):1891-8.
Li Y., et al. (2006) Mol Cell Endocrinol. 257-258:35-46.

## DATA

### SDS-PAGE




3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.