

PARP Recombinant Protein | PARP1 recombinant protein

PARP Protein, Human, Recombinant (His Tag)

CATALOG #
AAA257960

HOST
Baculovirus-Insect Cells

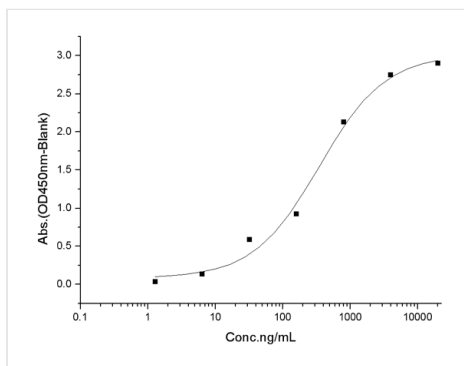
PRODUCT SYNONYMS

PARP; PARP Protein; Human; Recombinant (His Tag); Human PARP-1/PARP Protein (His Tag); ADPRT Protein; ADPRT1 Protein; ARTD1 Protein; pADPRT-1 Protein; PARP-1 Protein; PPOL Protein; poly (ADP-ribose) polymerase 1; PARP1 recombinant protein

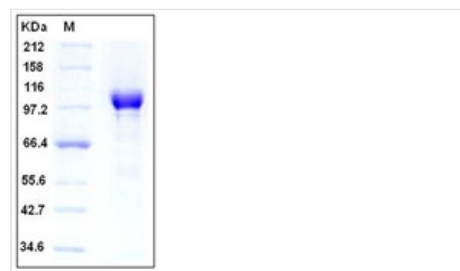
PRODUCT SPECIFICATIONS

Host	Baculovirus-Insect Cells
Purity/Purification	>90% as determined by SDS-PAGE
Form/Format	Liquid. Supplied as sterile 20mM Tris, 300mM NaCl, 10% glycerol, 0.5mM TCEP, 2mM EDTA, pH7.5. Please refer to the specific buffer information in the hard copy of CoA.
Sequence	Met1-Trp10 14
Species	Human
Endotoxin	<1.0EU per ug of the protein as determined by the LAL method
Predicted N Terminal	Met
Tag	C-His
Protein Construction	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.
Reconstitution	A hardcopy of COA with reconstitution instruction is sent along with the products. Please refer to it for detailed information.
Preparation and Storage	Samples are stable for up to twelve months from date of receipt at -20 degree C to -80 degree C. Store it under sterile conditions at -20 degree C to -80 degree C. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles. It is shipped out with blue ice.

IMAGES



SDS-PAGE



Application Data

Measured by its binding ability in a functional ELISA. Immobilized Human PARP His at 2 ug/ml (100 ul/well) can bind Human HSP70 His, biotinylated, the EC50 of HSP70 His, biotinylated is 0.2-1.0 ug/mL.

ADDITIONAL INFORMATION

Related Product Information for PARP1 recombinant protein	Background: Poly (ADP-ribose) polymerase 1(PRAP1), also known as NAD(+) ADP-ribosyltransferase 1(ADPRT), is a chromatin-associated enzyme that 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 2-3 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 demonstrated 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 are thus proposed as a targeted cancer therapy for recombination deficient cancers, such as BRCA2 tumors.
Product Categories/Family for PARP1 recombinant protein	Cancer Drug Targets
References	Malanga M. et al., 1998, J Biol Chem. 273: 11839-11843. Ariumi Y. et al., 1999, Oncogene. 18: 4616-4625. Helleday T. et al., 2005, Cell Cycle. 4: 1176-1178. Ahell I. et al., 2008, Nature. 451: 81-85.

NCBI AND UNIPROT INFORMATION

NCBI GI #	156523968
NCBI GeneID	142
NCBI Accession #	NP_001609.2
NCBI GenBank Nucleotide #	NM_001618.3
UniProt Accession #	P09874; Q8IUZ9; B1ANJ4
Molecular Weight	113,084 Da
NCBI Official Full Name	poly
NCBI Official Synonym Full Names	poly (ADP-ribose) polymerase 1
NCBI Official Symbol	PARP1
NCBI Official Synonym Symbols	PARP; PPOL; ADPRT; ARTD1; ADPRT1; PARP-1; ADPRT 1; pADPRT-1
NCBI Protein Information	poly [ADP-ribose] polymerase 1; poly [ADP-ribose] polymerase 1; poly(ADP-ribose) polymerase; poly(ADP-ribose) synthetase; poly[ADP-ribose] synthase 1; poly(ADP-ribosyl)transferase; ADP-ribosyltransferase NAD(+); NAD(+) ADP-ribosyltransferase 1; poly (ADP-
UniProt Protein Name	Poly [ADP-ribose] polymerase 1
UniProt Gene Name	PARP1
UniProt Synonym Gene Names	ADPRT; PPOL; PARP-1; ARTD1; ADPRT 1
UniProt Entry Name	PARP1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.