# Recombinant PARG (448-976) protein



Catalog No: 81479, 81579 Quantity: 50, 1000 μg
Expressed In: E. coli Concentration: 0.5 μg/μl

Source: Human

**Buffer Contents:** Recombinant PARG (448-976) protein is supplied in 25 mM Tris 8.0, 300mM NaCl, 20% glycerol, 0.5 mM TCEP.

**Background: PARG (Poly(ADP-ribose) glycohydrolase)** catalyzes the hydrolysis of glycosidic bonds of ADP-ribose polymers, producing monomeric ADP-ribose units. Thus, in conjunction with poly(ADP-ribose) polymerase (PARP), **PARG** activity regulates the extent of in vivo poly(ADP ribosyl)ation. **PARG** acts both as an endo- and exoglycosidase, releasing poly(ADP-ribose) of different length as well as ADP-ribose monomers. Involved in the synthesis of ATP in the nucleus, together with PARP1, NMNAT1 and NUDT5.

**Protein Details:** Recombinant PARG (448-976) protein that includes amino acids 448-976 of human PARG protein (accession number NP\_003622.2) was expressed in E. coli cells with an C-terminal 6xHis tag. The molecular weight of the protein is 62.26 kDa.

**Application Notes:** This product was manufactured as described in Protein Details. Where possible, Active Motif has developed functional or activity assays for recombinant proteins. Additional characterization such as enzyme kinetic activity assays, inhibitor screening or other biological activity assays may not have been performed for every product. All available data for a given product is shown on the lot-specific Technical Data Sheet.

**Storage and Guarantee:** Recombinant proteins in solution are temperature sensitive and must be stored at -80°C to prevent degradation. Avoid repeated freeze/thaw cycles and keep on ice when not in storage. This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.

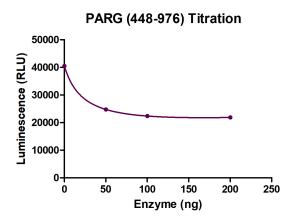
# PARG (448-976) kDa 130 100 70 55 40 35 25

### Recombinant PARG (448-976) protein

12.5% SDS-PAGE Coomassie staining

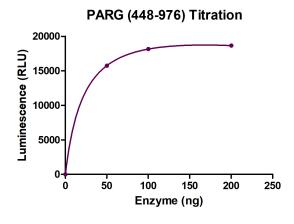
MW: 62.26 kDa

Purity: ≥ 95%



## ELISA for PARG (448-976) activity

25 μM NAD-Biotin and Actived DNA were added into ELISA plate (coated with histone H2A and H2B mixture) with PARP1 in ADPR Buffer and incubated for 1 hour at room temperature. After washing, different concentrations of PARG (448-976) was added into each well and incubated in reaction buffer for 1 hour at room temperature. Following Streptavidin-HRP and ECL incubation, the plate was read in a luminometer or microtiter-plate reader.



### **ELISA for ADPRS / ARH3 activity**

25 μM NAD-Biotin and Actived DNA were added into ELISA plate (coated with histone H2A and H2B mixture) with PARP1 in ADPR Buffer and incubated for 1 hour at room temperature. After washing, different concentrations of PARG (448-976) was added into each well and incubated in reaction buffer for 1 hour at room temperature. Following Streptavidin-HRP and ECL incubation, the plate was read in a luminometer or microtiter-plate reader.