

**Parg Antibody (N-term) Blocking Peptide**  
Synthetic peptide  
Catalog # BP7283a**Specification****Parg Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [Q86W56](#)**Parg Antibody (N-term) Blocking Peptide - Additional Information**

Gene ID 670;8505

**Other Names**

Poly(ADP-ribose) glycohydrolase, PARG

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [AP7283a](/products/AP7283a) was selected from the N-term region of human Parg. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**Parg Antibody (N-term) Blocking Peptide - Protein Information****Name** PARG{ECO:0000303|PubMed:14527731,  
ECO:0000312|HGNC:HGNC:8605}**Parg Antibody (N-term) Blocking Peptide - Background**

Poly(ADP-ribose) glycohydrolase (PARG) is the major enzyme responsible for the catabolism of poly(ADP-ribose), a reversible covalent-modifier of chromosomal proteins. The protein is found in many tissues and may be subject to proteolysis generating smaller, active products.

**Parg Antibody (N-term) Blocking Peptide - References**

Meyer,R.G., Exp. Cell Res. 313 (13), 2920-2936 (2007)Fisher,A.E., Mol. Cell. Biol. 27 (15), 5597-5605 (2007)Keil,C., J. Biol. Chem. 281 (45), 34394-34405 (2006)

### Function

Poly(ADP-ribose) glycohydrolase that degrades poly(ADP-ribose) by hydrolyzing the ribose-ribose bonds present in poly(ADP-ribose) (PubMed:[15450800](http://www.uniprot.org/citations/15450800)), PubMed:[21892188](http://www.uniprot.org/citations/21892188)), PubMed:[23102699](http://www.uniprot.org/citations/23102699)), PubMed:[23474714](http://www.uniprot.org/citations/23474714)), PubMed:[33186521](http://www.uniprot.org/citations/33186521)). PARG acts both as an endo- and exoglycosidase, releasing poly(ADP-ribose) of different length as well as ADP-ribose monomers (PubMed:[23102699](http://www.uniprot.org/citations/23102699)), PubMed:[23481255](http://www.uniprot.org/citations/23481255)). It is however unable to cleave the ester bond between the terminal ADP-ribose and ADP-ribosylated residues, leaving proteins that are mono-ADP-ribosylated (PubMed:[21892188](http://www.uniprot.org/citations/21892188)), PubMed:[23474714](http://www.uniprot.org/citations/23474714)), PubMed:[33186521](http://www.uniprot.org/citations/33186521)). Poly(ADP-ribose) is synthesized after DNA damage is only present transiently and is rapidly degraded by PARG (PubMed:[23102699](http://www.uniprot.org/citations/23102699)). Required to prevent detrimental accumulation of poly(ADP-ribose) upon prolonged replicative stress, while it is not required for recovery from transient replicative stress (PubMed:[24906880](http://www.uniprot.org/citations/24906880)). Responsible for the prevalence of mono-ADP-ribosylated proteins in cells, thanks to its ability to degrade poly(ADP-ribose) without cleaving the terminal protein-ribose bond (PubMed:[24906880](http://www.uniprot.org/citations/24906880)).

ef="http://www.uniprot.org/citations/33186521" target="\_blank">33186521</a>). Required for retinoid acid- dependent gene transactivation, probably by removing poly(ADP-ribose) from histone demethylase KDM4D, allowing chromatin derepression at RAR- dependent gene promoters (PubMed:<a href="http://www.uniprot.org/citations/23102699" target="\_blank">23102699</a>). Involved in the synthesis of ATP in the nucleus, together with PARP1, NMNAT1 and NUDT5 (PubMed:<a href="http://www.uniprot.org/citations/27257257" target="\_blank">27257257</a>). Nuclear ATP generation is required for extensive chromatin remodeling events that are energy-consuming (PubMed:<a href="http://www.uniprot.org/citations/27257257" target="\_blank">27257257</a>).

#### Cellular Location

[Isoform 1]: Nucleus Note=Colocalizes with PCNA at replication foci (PubMed:21398629) Relocalizes to the cytoplasm in response to DNA damage (PubMed:16460818). [Isoform 3]: Cytoplasm [Isoform 5]: Mitochondrion matrix

#### Tissue Location

Ubiquitously expressed.

#### Parg Antibody (N-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)