

## Mouse anti-Human PARP Monoclonal Antibody | anti-PARP1 antibody

Anti-PARP Antibody, Mouse Monoclonal

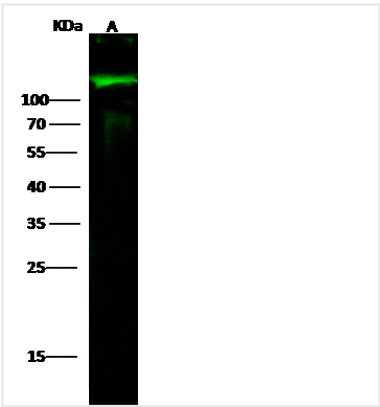
| CATALOG # | HOST  | REACTIVITY | APPLICATIONS                                            |
|-----------|-------|------------|---------------------------------------------------------|
| AAA27741  | Mouse | Human      | Western Blot, Immunohistochemistry, Immunoprecipitation |

### PRODUCT SYNONYMS

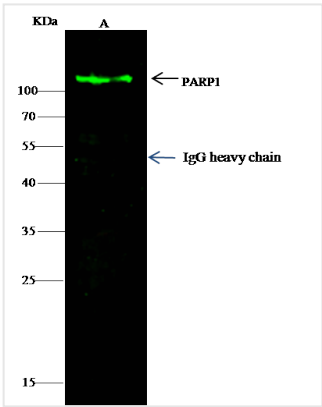
PARP; Monoclonal Antibody; Anti-PARP Antibody; Mouse Monoclonal; PARP-1/PARP Antibody; Mouse MAb; poly (ADP-ribose) polymerase 1; Anti-ADPRT Antibody; Anti-ADPRT1 Antibody; Anti-ARTD1 Antibody; Anti-pADPRT-1 Antibody; Anti-PARP-1 Antibody; Anti-PPOL Antibody; anti-PARP1 antibody

### PRODUCT SPECIFICATIONS

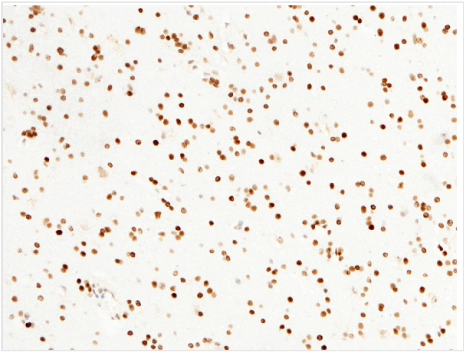
|                                                 |                                                                                                                                                                                                                                                                                                          |
|-------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                            | Mouse                                                                                                                                                                                                                                                                                                    |
| Reactivity                                      | Human                                                                                                                                                                                                                                                                                                    |
| Clonality                                       | Monoclonal                                                                                                                                                                                                                                                                                               |
| Isotype                                         | Mouse IgG1                                                                                                                                                                                                                                                                                               |
| Clone Number                                    | 04                                                                                                                                                                                                                                                                                                       |
| Specificity                                     | Human PARP-1/PARP                                                                                                                                                                                                                                                                                        |
| Purity/Purification                             | Protein A                                                                                                                                                                                                                                                                                                |
| Form/Format                                     | Liquid; 0.2um filtered solution in PBS                                                                                                                                                                                                                                                                   |
| Applicable Applications for anti-PARP1 antibody | WB (Western Blot), IHC (Immunohistochemistry), IP (Immunoprecipitation)                                                                                                                                                                                                                                  |
| Application Notes                               | WB: 1:500-1:1000<br>IHC-P: 1:100-1:500<br>IP: 0.2-1uL/mg of lysate                                                                                                                                                                                                                                       |
| Immunogen                                       | Recombinant Human PARP-1/PARP protein                                                                                                                                                                                                                                                                    |
| Conjugation                                     | Unconjugated                                                                                                                                                                                                                                                                                             |
| Preparation                                     | This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, recombinant Human PARP-1/PARP (rh PARP-1/PARP). The IgG fraction of the cell culture supernatant was purified by Protein A affinity chromatography. |
| Preparation and Storage                         | This antibody can be stored at 2-8 degree C for one month without detectable loss of activity. Antibody products are stable for twelve months from date of receipt when stored at -20 degree C to -80 degree C. Preservative-Free. Avoid repeated freeze-thaw cycles.                                    |



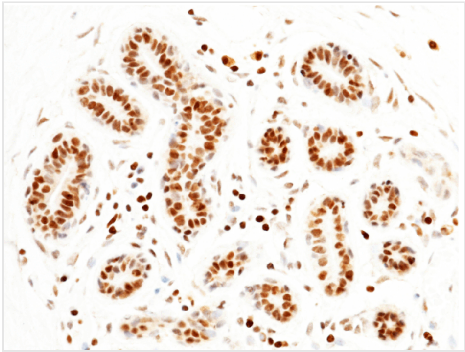
**WB (Western Blot)**  
Anti-PARP1 mouse monoclonal antibody at 1:500 dilution Lane A: Jurkat Whole Cell Lysate Lysates/proteins at 30 ug per lane. Secondary Goat Anti-Mouse IgG H&L (Dylight800) at 1/15000 dilution. Developed using the Odyssey technique. Performed under reducing conditions. Predicted band size: 113 kDa Observed band size: 113 kDa



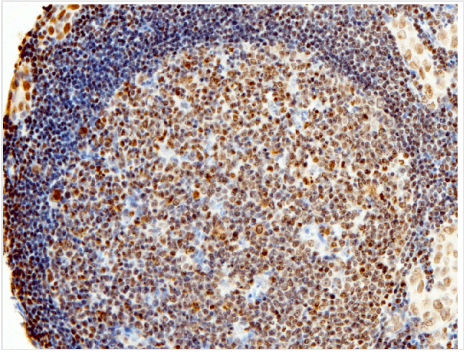
**IP (Immunoprecipitation)**  
PARP1 was immunoprecipitated using: Lane A: 0.5 mg Jurkat Whole Cell Lysate 0.5 uL anti-PARP1 mouse monoclonal antibody and 15 ul of 50 % Protein G agarose. Primary antibody: Anti-PARP1 mouse monoclonal antibody, at 1:500 dilution Secondary antibody: Dylight 800-labeled antibody to Mouse IgG (H+L), at 1:7500 dilution Developed using the odssey technique. Performed under reducing conditions. Predicted band size: 113 kDa Observed band size: 113 kDa



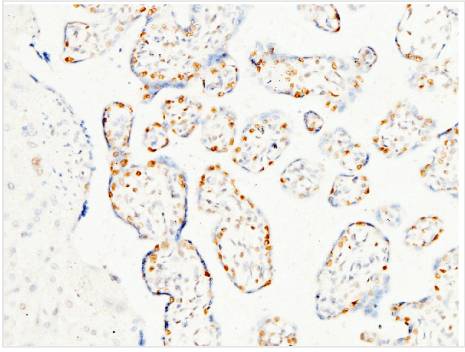
**IHC (Immunohistochemistry)**  
Immunochemical staining of human PARP1 in human brain with mouse monoclonal antibody at 1:300 dilution, formalin-fixed paraffin embedded sections. Positive staining was localized to nucleus.



**IHC (Immunohistochemistry)**  
Immunochemical staining of human PARP1 in human breast with mouse monoclonal antibody at 1:300 dilution, formalin-fixed paraffin embedded sections. Positive staining was localized to nucleus.



**IHC (Immunohistochemistry)**  
Immunochemical staining of human PARP1 in human lymph node with mouse monoclonal antibody at 1:300 dilution, formalin-fixed paraffin embedded sections. Positive staining was localized to nucleus.



**IHC (Immunohistochemistry)**  
Immunochemical staining of human PARP1 in human placenta with mouse monoclonal antibody at 1:300 dilution, formalin-fixed paraffin embedded sections. Positive staining was localized to nucleus.

## ADDITIONAL INFORMATION

|                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-PARP1 antibody | 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-ribosylation). The ADP-D-ribosyl group of NAD <sup>+</sup> 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 anti-PARP1 antibody   | 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                | <b>PARP1</b>                                                                                                                                                                                                                                                    |
| 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.

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Online datasheet: <https://www.aaabiotech.com/monoclonal/parp-antibody-clone-04-western-blot-immunohistochemistry-immunoprecipitation-elisa/27741>