Mouse PARP Monoclonal Antibody | anti-PARP1 antibody

Anti-PARP Antibody (monoclonal, 10E11)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125899	**Mouse**	**Human, Mouse, Rat**	**Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot**

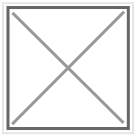
PRODUCT SYNONYMS

PARP; Monoclonal Antibody; Anti-PARP Antibody (monoclonal; 10E11); PARP1; ADPRT; PPOL; Poly [ADP-ribose] polymerase 1; PARP-1; EC 2. 4. 2. 30; ADP-ribosyltransferase diphtheria toxin-like 1; ARTD1; DNA ADP-ribosyltransferase PARP1; EC 2. 4. 2. -; NAD(+ ADP-ribosyltransferase 1; ADPRT 1; Poly[ADP-ribose] synthase 1; Protein poly-ADP-ribosyltransferase PARP1; poly (ADP-ribose) polymerase 1; anti-PARP1 antibody

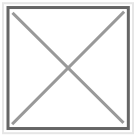
PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	Mouse IgG2a
Clone Number	10E11
Specificity	Mouse IgG monoclonal antibody for PARP detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-PARP1 antibody	FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human PARP recombinant protein (Position: Q670-R858). Human PARP shares 94% and 95% amino acid (aa) sequence identity with mouse and rat PARP, respectively.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

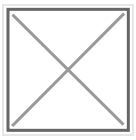
IMAGES



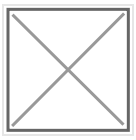
FCM/FACS (Flow Cytometry)
Figure 5. Flow Cytometry analysis of HL-60 cells using anti-PARP antibody (AAA125899).Overlay histogram showing HL-60 cells stained with AAA125899 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti- PARP Antibody (AAA125899, 1μg/1x106 cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10μg/1x106 cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1μg/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)
Figure 4. IF analysis of PARP using anti- PARP antibody (AAA125899).PARP was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5μg/mL mouse anti- PARP Antibody (AAA125899) overnight at 4 degree C. DyLight®488 Conjugated Goat Anti-Mouse IgG (BA1126) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemisry)
Figure 3. IHC analysis of PARP using anti-PARP antibody (AAA125899).PARP was detected in paraffin-embedded section of human ovarian serous adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA uffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-PARP Antibody (AAA125899) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohiostchemistry)
Figure 2. IHC analysis of PARP using anti-PARP antibody (AAA125899).PARP was detected in paraffin-embedded section of human gallbladder adenocarcinoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-PARP Antibody (AAA125899) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

WB (Western Blot)
Figure 1. Western blot analysis of PARP using anti-PARP antibody (AAA125899).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human MCF-7 whole cell lysatesLane 2: human HELA whole cell lysatesLane 3: human DAUDI whole cell lysatesLane 4: human HEK293 whole cell lysatesLane 5: rat testis tissue lysatesLane 6: mouse testis tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with mouse anti- PARP antigen affinity purified monoclonal antibody (Catalog # AAA125899) at 0. 25 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PARP at approximately 113KD. The expected band size for PARP is at 113KD.

ADDITIONAL INFORMATION

Related Product Information for anti-PARP1 antibody	Poly [ADP-ribose] polymerase 1 (PARP1), also known as ADPRT or PPOL is an enzyme that in humans is encoded by the PARP1 gene. PARP1 gene is mapped to 1q42. 12. This gene encodes a chromatin-associated enzyme, poly(ADP-ribosyl)transferase, which modifies various nuclear proteins by poly(ADP-ribosyl)ation. The modification is dependent on DNA and is involved in the regulation of various important cellular processes such as differentiation, proliferation, and tumor transformation and also in the regulation of the molecular events involved in the recovery of cell from DNA damage. In addition, this enzyme may be the site of mutation in Fanconi anemia, and may participate in the pathophysiology of type I diabetes.
References	1. Ambrose, H. E., Willimott, S., Beswick, R. W., Dantzer, F., Menissier de Murcia, J., Yelamos, J., Wagner, S. D. Poly(ADP-ribose) polymerase-1 (Parp-1)-deficient mice demonstrate abnormal antibody responses. Immunology 127: 178-186, 2008. 2. Doege, C. A., Inoue, K., Yamashita, T., Rhee, D. B., Travis, S., Fujita, R., Guarnieri, P., Bhagat, G., Vanti, W. B., Shih, A., Levine, R. L., Nik, S., Chen, E. I., Abeliovich, A. Early-stage epigenetic modification during somatic cell reprogramming by Parp1 and Tet2. Nature 488: 652-655, 2012.

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.

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Online datasheet: https://stage.aaabiotech.com/monoclonal/parp-antibody-clone-10e11-flow-cytometry-immunofluorescence-immunocytochemistry-immunohistochemistry-western-blot-elisa/125899