For Research Use Only

## PARP1 Monoclonal antibody, PBS Only (Capture/Detector)



**Purification Method:** 

Protein G purification

CloneNo.:

1D7D4

Catalog Number:66520-1-PBS Featur

**Featured Product** 

**Basic Information** 

Catalog Number: GenBank Accession Number:

66520-1-PBS BC037545 Size: GeneID (NCBI): 1000 μg/ml 142

Source: UNIPROT ID:
Mouse P09874
Isotype: Full Name:

IgG1 poly (ADP-ribose) polymerase 1

Immunogen Catalog Number: Calculated MW: AG19173 1014 aa, 113 kDa

Observed MW:

113-116 kDa, 85-89 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, FC (Intra), IP, Indirect ELISA, Sample

test

Species Specificity:

human, mouse, rat

## **Background Information**

PARP1 (poly(ADP-ribose) polymerase 1) is a nuclear enzyme catalyzing the poly(ADP-ribosyl)ation of many key proteins in vivo. The normal function of PARP1 is the routine repair of DNA damage. Activated by DNA strand breaks, the PARP1 is cleaved into an 85 to 89-kDa COOH-terminal fragment and a 24-kDa NH2-terminal peptide by caspases during the apoptotic process. The appearance of PARP fragments is commonly considered an important biomarker of apoptosis. In addition to caspases, other proteases like calpains, cathepsins, granzymes, and matrix metalloproteinases (MMPs) have also been reported to cleave PARP1 and give rise to fragments ranging from 42-89-kDa. This antibody was generated against the N-terminal region of human PARP1 and it recognizes the full-length as well as the cleavage of the PARP1.

Storage

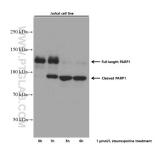
Storage:

Store at -80°C.

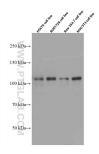
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS Only

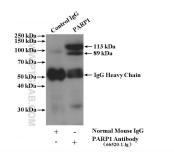
## Selected Validation Data



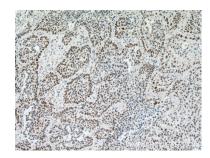
Jurkat cells (20  $\,\mu$  g/lane) treated with staurosporine were subjected to SDS PAGE followed by western blot with 66520-1-lg (PARP1 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer formulation.



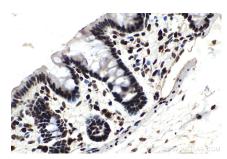
Various lysates were subjected to SDS PAGE followed by western blot with 66520-1-1g (PARP1 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer formulation.



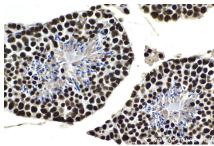
IP result of anti-PARP1 (IP:66520-1-Ig, 5ug; Detection:66520-1-Ig 1:10000) with K-562 cells lysate 2760 ug. This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer formulation.



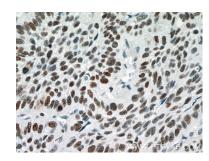
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66520-1-lg (PARP1 antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer formulation.



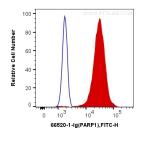
Immunohistochemical analysis of paraffinembedded rat colon tissue slide using 66520-1-lg (PARP1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer formulation.



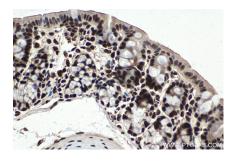
Immunohistochemical analysis of paraffinembedded mouse testis tissue slide using 66520-1-Ig (PARP1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer formulation.



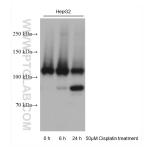
Immunohistochemical analysis of paraffinembedded human lung cancer tissue slide using 66520-1-lg (PARP1 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer formulation.

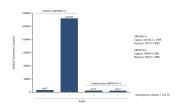


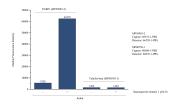
1X10^6 HeLa cells were intracellularly stained with 0.2 ug Anti-Human PARP1 (66520-1-lg, Clone:1D7D4) and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Mouse IgG1 Isotype Control (66360-1-lg, Clone: T1F8D3F10) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer



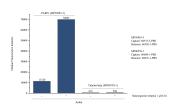
Immunohistochemical analysis of paraffinembedded mouse colon tissue slide using 66520-1-Ig (PARP1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer formulation.







Various lysates were subjected to SDS PAGE followed by western blot with 66520-1-lg (PARP1 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer formulation.



Cytometric bead array in cell lysate using MP50985-3, Human only PARP1 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 60555-3-PBS. Detection antibody: 66520-1-PBS. Cell lysate: Non-treated Jurkat and Staurosporine treated Jurkat (10 µ g/well). Non-related target Tubulin-beta Recombinant Matched Antibody Pair (MP00550-1) was served as control.

Cytometric bead array in cell lysate using MP50985-1, Cleaved PARP1 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66520-1-PBS. Detection antibody: 60555-2-PBS. Cell lysate: Non-treated Jurkat and Staurosporine treated Jurkat (10 µ g/well). Non-related target Tubulin-beta Recombinant Matched Antibody Pair

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Immunofluorescent analysis of (4% PFA) fixed Neuro-2a cells using PARP1 antibody (66520-1-lg, Clone: 1D7D4) at dilution of 1:400 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) (SA00013-1), CL594-Phalloidin (red). This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer formulation.

Cytometric bead array in cell lysate using MP50985-2, Cleaved PARP1 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 605551-PBS. Detection antibody: 66520-1-PBS. Cell lysate: Non-treated Jurkat and Staurosporine treated Jurkat (10 µ g/well). Non-related target Tubulin-beta Recombinant Matched Antibody Pair (MP00550-1) was served as control.