For Research Use Only

PARP1 Monoclonal antibody, PBS Only (Capture/Detector)

Catalog Number:66520-1-PBS Featured Product

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
66520-1-PBS

Size:
100ug , Concentration: 1 mg/ml by Nanodrop;

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG19173

GenBank Accession Number:
BC037545

GeneID (NCBI):
142

UNIPROT ID:
P09874

Full Name:
poly (ADP-ribose) polymerase 1

Calculated MW:
1014 aa, 113 kDa

Observed MW:
113-116 kDa, 85-89 kDa

Purification Method:
Protein G purification

CloneNo.:
1D7D4

Applications

Tested Applications:
WB, IHC, IF/ICC, FC (Intra), IP, Indirect ELISA, Sample test

Species Specificity:
human, mouse, rat

Product Information

66520-1-PBS targets PARP1 as part of a matched antibody pair:

MP50985-1: 66520-1-PBS capture and 60555-2-PBS detection (validated in N/A)

MP50985-2: 60555-1-PBS capture and 66520-1-PBS detection (validated in N/A)

MP50985-3: 60555-3-PBS capture and 66520-1-PBS detection (validated in N/A)

Unconjugated mouse monoclonal antibody pair in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications.Antibody use should be optimized by the end user for each application and assay.

Background Information

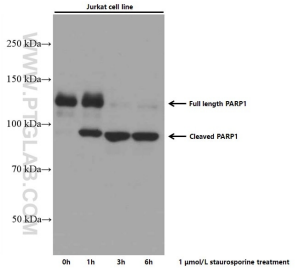
PARP1 (poly(ADP-ribose) polymerase 1) is a nuclear enzyme catalyzing the poly(ADP-ribosyl)ation of many key proteins in vivo. The normal function of PARP1 is the routine repair of DNA damage. Activated by DNA strand breaks, the PARP1 is cleaved into an 85 to 89-kDa COOH-terminal fragment and a 24-kDa 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

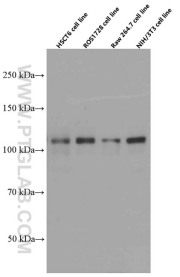
Storage:
Store at -80°C.
Storage Buffer:
PBS Only

For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

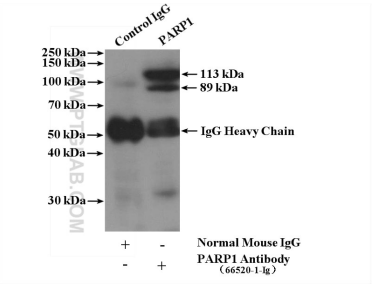
Selected Validation Data



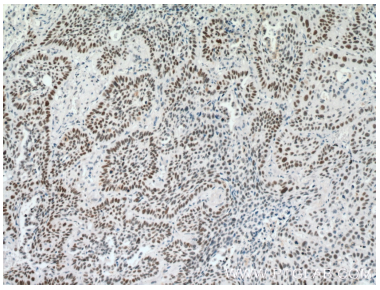
Jurkat cells (20 µg/lane) treated with staurosporine were subjected to SDS PAGE followed by western blot with 66520-1-Ig (PARP1 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer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



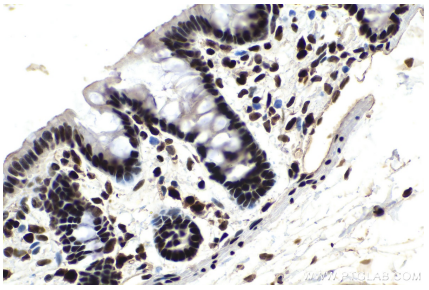
Various lysates were subjected to SDS PAGE followed by western blot with 66520-1-Ig (PARP1 antibody) at dilution of 1:40000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer formulation.



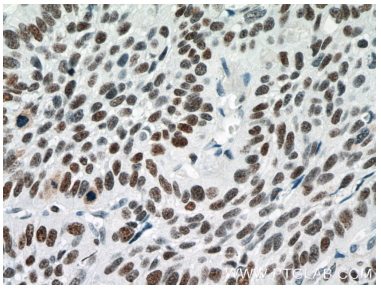
IP result of anti-PARP1 (IP:66520-1-Ig, 5ug; Detection:66520-1-Ig 1:10000) with K-562 cells lysate 2760 ug. This data was developed using the same antibody clone with 66520-1-PBS in a different storage buffer formulation.



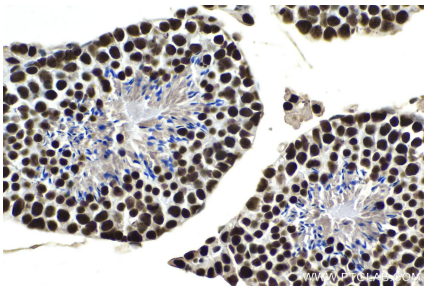
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66520-1-Ig (PARP1 antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66520-1-PBS in a different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



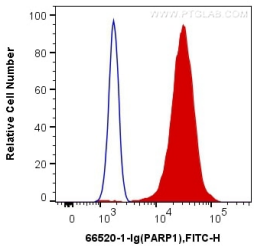
Immunohistochemical analysis of paraffin-embedded rat colon tissue slide using 66520-1-Ig (PARP1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66520-1-PBS in a different storage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



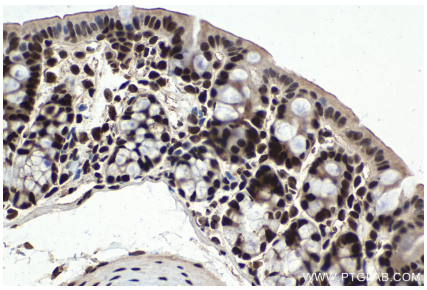
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue slide using 66520-1-Ig (PARP1 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66520-1-PBS in a different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



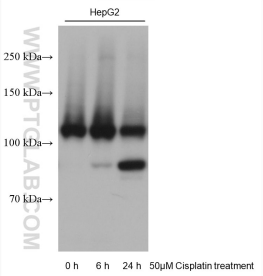
Immunohistochemical analysis of paraffin-embedded mouse testis tissue slide using 66520-1-Ig (PARP1 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 66520-1-PBS in a different storage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

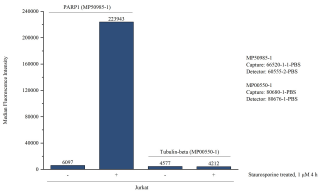


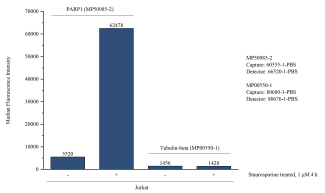
1X10^6 HeLa cells were intracellularly stained with 0.2 ug Anti-Human PARP1 (66520-1-Ig, Clone:1D7D4) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.2 ug Mouse IgG1 Isotype Control (66360-1-Ig, Clone: T1F8D3F10) (blue). Cells were fixed and permeabilized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



Immunohistochemical analysis of paraffin-embedded 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.







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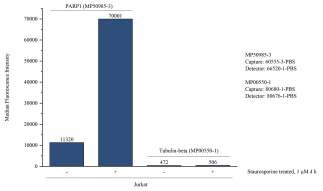
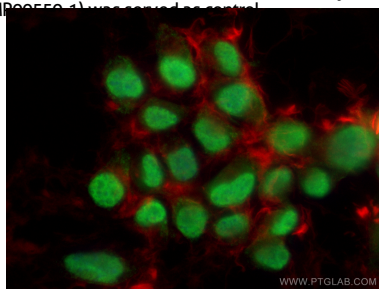


Cytometric bead array in cell lysate using MP50985-1, Cleaved PARP1 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 66520-1-PBS. Detection antibody: 60555-2-PBS. Cell lysate: Non-treated Jurkat and Staurosporine treated Jurkat (10µg/well). Non-related target Tubulin-beta Recombinant Matched Antibody Pair (MP00550-1) was served as control.



Cytometric bead array in cell lysate using MP50985-2, Cleaved PARP1 Monoclonal Matched Antibody Pair, PBS Only. Capture antibody: 60555-1-PBS. Detection antibody: 66520-1-PBS. Cell lysate: Non-treated Jurkat and Staurosporine treated Jurkat (10µg/well). Non-related target Tubulin-beta Recombinant Matched Antibody Pair (MP00550-1) was served as control.

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 (10µg/well). Non-related target Tubulin-beta Recombinant Matched Antibody Pair (MP00550-1) was served as control.

Immunofluorescent analysis of (4% PFA) fixed Neuro-2a cells using PARP1 antibody (66520-1-Ig, 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.