For Research Use Only

Cleaved PARP1 Monoclonal antibody, PBS Only (Capture)

Catalog Number:60555-1-PBS

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Antibodies | ELISA kits | Proteins
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Basic Information

Catalog Number:
60555-1-PBS

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

Source:
Mouse

Isotype:
IgG1

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:
89 kDa

Purification Method:
Protein G purification

CloneNo.:
4G4C8

Applications

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

Species Specificity:
human, mouse, rat

Product Information

60555-1-PBS targets Cleaved PARP1 as part of a matched antibody pair:

MP50985-2: 60555-1-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

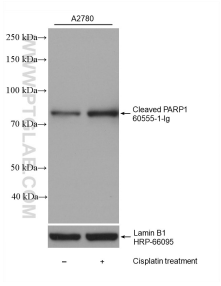
PARP1 (poly(ADP-ribose) polymerase 1) is a nuclear enzyme catalyzing the poly(ADP-ribosyl)ation of many key proteins in vivo. The normal function of PARP1 is the routine repair of DNA damage. Activated by DNA strand breaks, the PARP1 is cleaved into an 85 to 89-kDa COOH-terminal fragment and a 24 kDa 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 only recognizes the cleaved form of PAPR1 but not full-length PARP1.

Storage

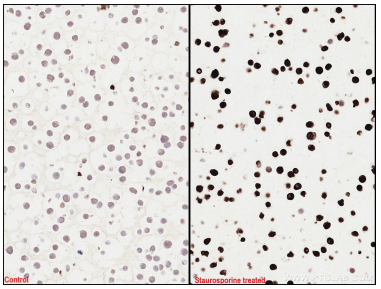
Storage:
Store at -80°C.
Storage Buffer:
PBS Only

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

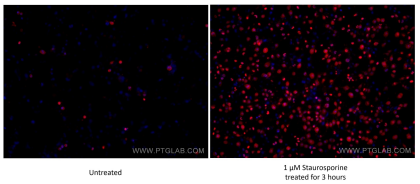
Selected Validation Data



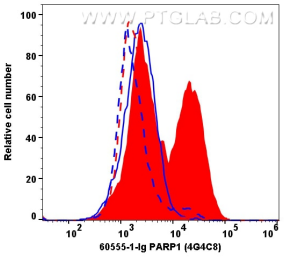
Staurosporine treated and untreated A2780 cells were subjected to SDS PAGE followed by western blot with 60555-1-Ig (Cleaved PARP1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with HRP-conjugated Lamin B1 (HRP-66095) antibody as a loading control. This data was developed using the same antibody clone with 60555-1-PBS in a different storage buffer formulation.



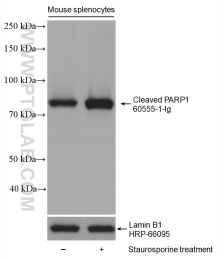
Immunohistochemical analysis of paraffin-embedded Jurkat (left) and Staurosporine treated Jurkat (right) cells slide using 60555-1-Ig (Cleaved PARP1 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 60555-1-PBS in a different storage buffer formulation.



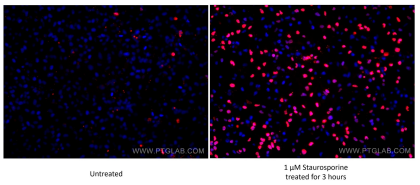
Immunofluorescent analysis of (4% PFA) fixed untreated and 1 μM Staurosporine (3 hours) treated HSC-T6 cells using Cleaved PARP1 antibody (60555-1-Ig, Clone: 4G4C8) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004). This data was developed using the same antibody clone with 60555-1-PBS in a different storage buffer formulation.



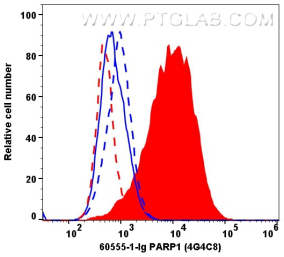
1x10^6 HSC-T6 cell (dash lines) and 1 μM Staurosporine (3 hours) treated HSC-T6 cells (full lines) were intracellularly stained with 0.4 μg Cleaved PARP1 Monoclonal Antibody (60555-1-Ig, Clone:4G4C8, red) and CoraLite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO.RGAM005). Mouse IgG1 isotype control (66360-1-Ig, Clone: 1F8D3, blue) was parallel stained as control. Cells were fixed with 4% PFA. This data was developed using



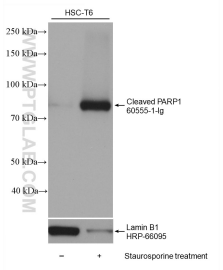
Staurosporine treated and untreated mouse splenocytes were subjected to SDS PAGE followed by western blot with 60555-1-Ig (Cleaved PARP1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with HRP-conjugated Lamin B1 (HRP-66095) antibody as a loading control. This data was developed using the same antibody clone with 60555-1-PBS in a different storage buffer formulation.



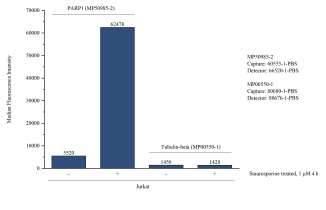
Immunofluorescent analysis of (4% PFA) fixed untreated and 1 μM Staurosporine (3 hours) treated HeLa cells using Cleaved PARP1 antibody (60555-1-Ig, Clone: 4G4C8) at dilution of 1:366 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004). This data was developed using the same antibody clone with 60555-1-PBS in a different storage buffer formulation.



1x10^6 HeLa cell (dash lines) and 1 μM Staurosporine (3 hours) treated HeLa cells (full lines) were intracellularly stained with 0.1 μg Cleaved PARP1 Monoclonal Antibody (60555-1-Ig, Clone:4G4C8, red) and CoraLite® Plus 647-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO.RGAM005). Mouse IgG1 isotype control (66360-1-Ig, Clone: 1F8D3, blue) was parallel stained as control. Cells were fixed with 4% PFA . This data was developed



Staurosporine treated and untreated HSC-T6 cells were subjected to SDS PAGE followed by western blot with 60555-1-Ig (Cleaved PARP1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and re-blotted with HRP-conjugated Lamin B1 (HRP-66095) antibody as a loading control. This data was developed using the same antibody clone with 60555-1-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: 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.