PARP1 (cleaved Asp214, Asp215) Monoclonal Antibody (194C1439)

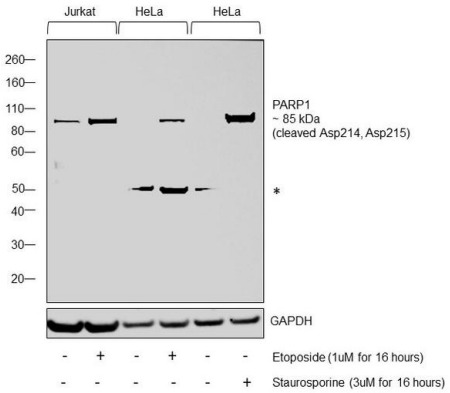
Product Details	
Size	100 µg
Species Reactivity	Human, Mouse
Host/Isotype	Mouse / IgG2b, kappa
Class	Monoclonal
Type	Antibody
Clone	194C1439
Conjugate	Unconjugated
Immunogen	Synthetic peptide corresponding to residues near the 214/215-cleavage site of human PARP.
Form	Liquid
Concentration	1.0 mg/mL
Purification	Protein G
Storage buffer	PBS
Contains	0.05% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_1077468

Applications	Tested Dilution	Publications
Western Blot (WB)	1-2 µg/mL	-
Immunocytochemistry (ICC/IF)	2-5 µg/mL	-
Flow Cytometry (Flow)	1-3 µg/test	-

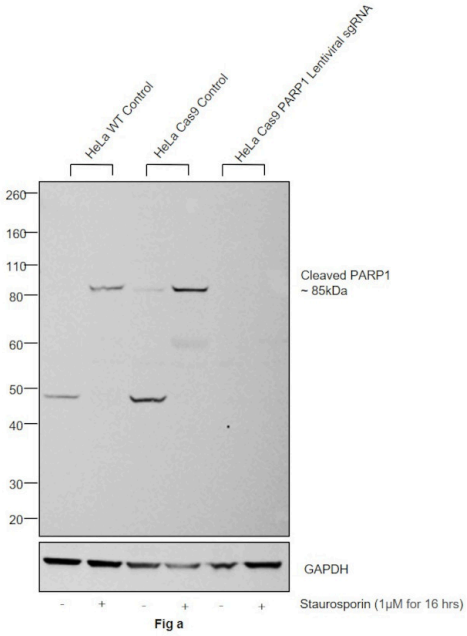
Product Specific Information

Suggested positive control: camptothecin treated HL-60 (12 hr).

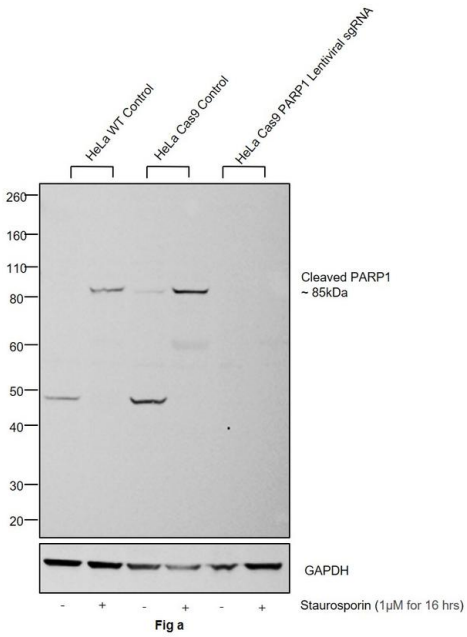
Product Images For PARP1 (cleaved Asp214, Asp215) Monoclonal Antibody (194C1439)



PARP1 (cleaved Asp214, Asp215) Antibody (MA1-41020) in WB
Western blot was performed using Anti-PARP Monoclonal Antibody (194C1439) (Product # MA1-41020) and a 85 kDa band corresponding to PARP (cleaved form) was observed across all cell lines along with an uncharacterized band (*) at ~50 kDa. Nuclear enriched extracts (40 µg lysate) of Jurkat (Lane 1), Jurkat treated with Etoposide (1 µM for 16 hours) (Lane 2), HeLa (Lane 3), HeLa treated with Etoposide (1 µM for 16 hours) (Lane 4), HeLa (Lane 5), HeLa treated with Staurosporine (3 µM for 16 hours) (Lane 6) were electrophoresed using NuPAGE™ 4-12% Bis-Tris Protein Gel (Product # NP0321BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1 µg/mL concentration) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177,1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using SuperSignal™ West Dura Extended Duration Substrate (Product # 34076).



PARP1 (cleaved Asp214, Asp215) Antibody (MA1-41020)
Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A reduced signal was observed for target protein in HeLa Cas9 cell line transduced with PARP1 Lentiviral sgRNA compared to control cell line using Anti-PARP1 (cleaved Asp214, Asp215) Monoclonal Antibody (194C1439) (Product # MA1-41020). {KO}



PARP1 (cleaved Asp214, Asp215) Antibody (MA1-41020) in WB
CRISPR-Cas9 mediated genome editing of PARP1 (as confirmed by next generation sequencing) was achieved by using LentiArray™ Lentiviral sgRNA (Product # A32042, Assay ID CRISPR978664_LV) and LentiArray Cas9 Lentivirus (Product # A32064). Western blot analysis of PARP1 was performed by loading 30 µg of HeLa Wild Type (Lane 1), Treated HeLa Wild Type (Lane 2), HeLa Cas9 (Lane 3), Treated HeLa Cas9 (Lane 4), HeLa Cas9 cells transduced with PARP1 Lentiviral sgRNA (Lane 5) and Treated HeLa Cas9 cells transduced with PARP1 Lentiviral sgRNA (Lane 6) whole cell extracts. The samples were electrophoresed using NuPAGE™ Novex™ 4-12% Bis-Tris Protein Gel (Product # NP0322BOX). Resolved proteins were then transferred onto a nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with Anti-PARP1 (cleaved Asp214, Asp215) Monoclonal Antibody (194C1439) (Product # MA1-41020) using 1:1,000 dilution and Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177 1:4,000 dilution). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005). Even though NGS analysis determine the clone as partial KO, there was complete loss of signal in sgRNA transduced cells confirming that the antibody is specific to PARP1. An uncharacterized band was observed at 49 kDa in HeLa Wild Type and Cas9 untreated samples. Treatment

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