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Datasheet for 200-401-GM8

PARP1 (N-term ZF1) Antibody

Overview

Description:	Anti-PARP1 (N-term ZF1) (RABBIT) Antibody - 200-401-GM8
Item No.:	200-401-GM8
Size:	100 µg
Applications:	2D-PAGE, IHC, WB
Reactivity:	Human
Host Species:	Rabbit

Product Details

Background:	PARP1 is the primary member of the poly(ADP-ribose) polymerase family, whose function is to signal DNA damage (and to recruit repair proteins) by PARylation. PARP1 is also involved in multiple cell death pathways, including apoptosis, necroptosis, autophagy, and a relatively new pathway termed parthanatos. It has been implicated in a new form of cell death termed parthanatos. PARP1 can also promote tissue survival by shifting the balance of cell death programs between autophagy and necrosis. Clinical studies have shown vulnerability to PARP inhibitors in DNA repair defective cancers. Anti-PARP1 (N-term ZF1) antibody is useful for researchers interested in cellular processes including DNA damage, transcriptional control, and stem cell identity research.
Synonyms:	rabbit anti-PARP1 Antibody, Poly [ADP-ribose] polymerase 1, ADP-ribosyltransferase diphtheria toxin-like 1, ARTD1, NAD(+) ADP-ribosyltransferase 1, ADPRT 1, PPOL
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	PARP1
Reactivity:	Human
Immunogen Type:	Recombinant Protein

Immunogen:	PARP1 (N-term ZF1) purified antibody was prepared from whole rabbit serum produced by repeated immunizations with n-terminus region of human PARP1 zinc finger domain recombinant protein.
Purity/Specificity:	PARP1 (N-term ZF1) was purified from monospecific antiserum by immunoaffinity chromatography using protein A coupled to agarose beads. This antibody is specific for human PARP1 protein. No cross reactivity detected towards other PARP members when using siRNAs against 18 PARP family members. Cross-reactivity with PARP1 from other sources has not been determined.
Relevant Links:	• GeneID - 142 • UniProtKB - P09874

Application Details

Tested Applications:	2D-PAGE, IHC, WB
Application Note:	Anti-PARP1 (N-term ZF1) antibody has been validated by western blotting, IHC, and nanoimmunoassay (NIA). Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 113 kDa in size corresponding to PARP-1 by western blotting in the appropriate cell lysate or extract.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
IHC:	1:100
WB:	1:1000

Formulation

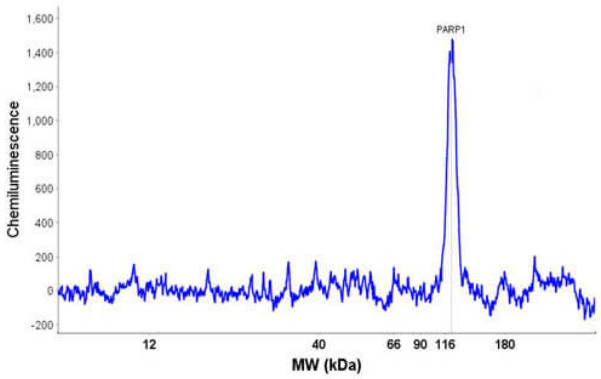
Physical State:	Liquid (sterile filtered)
Concentration:	1.0 mg/ml by UV absorbance at 280 nm
Buffer:	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Preservative:	0.01% (w/v) Sodium Azide
Stabilizer:	None

Shipping & Handling

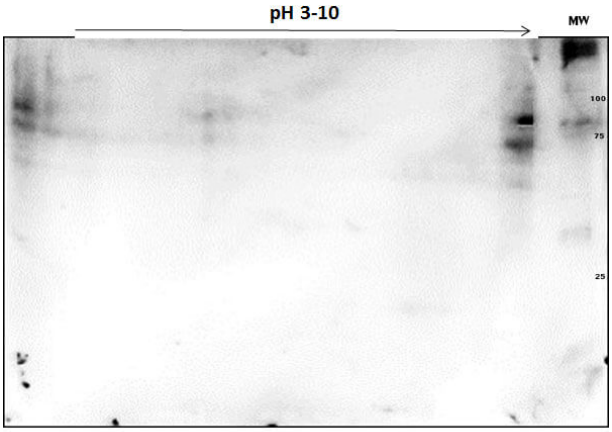
Shipping Condition:	Dry Ice

Storage Condition:	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Expiration:	Expiration date is one (1) year from date of receipt.

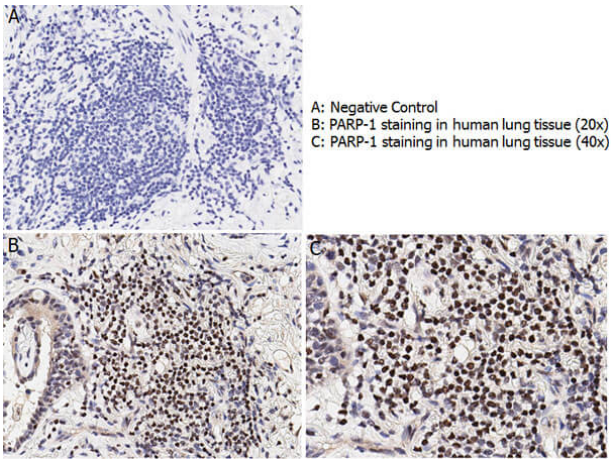
Images



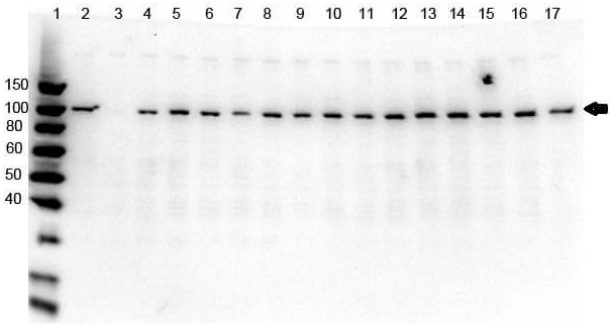
Peggy Electropherogram
Peggy Sue™ Size Separation Electropherogram of OVCAR-8 lysates in no-salt buffer and detected with Anti-PARP1 (N-term ZF1). UV immobilization time: 250 seconds. Protein concentration: 577 µg/mL; 120 s UV immobilization. Primary antibody concentration: 20µg/mL. Primary antibody incubation time: 180 min. Exposure time: multi-image analysis exposure. Predicted/observed: ~116 kDa. Image courtesy of Phil Lorenzi at MD Anderson.



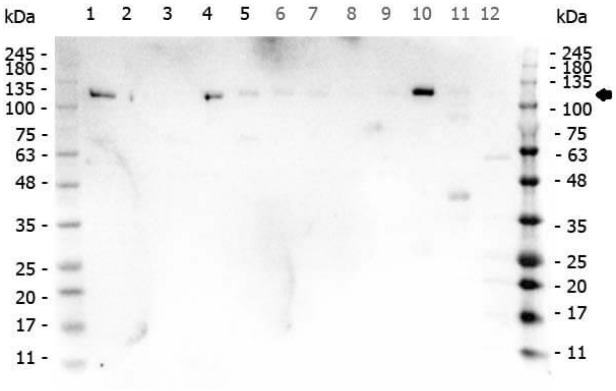
2D PAGE
OVCAR-8 Wild Type Lysate was separated on 2D SDS-PAGE and blotted on PVDF to analyze immunocoverage of PARP1 antibody specific for the zinc finger 1 domain of PARP1. Primary Antibody: Anti-PARP1 (n-term) antibody 1:200 overnight at 4°C. Secondary Antibody: Goat anti-rabbit Peroxidase (611-103-122) at 1:2,000 at RT for 30min. Blocking Buffer: BlockOut (p/n MB-073) for 30 min at RT. Predicted/observed: ~110 kDa and pI 9.7.



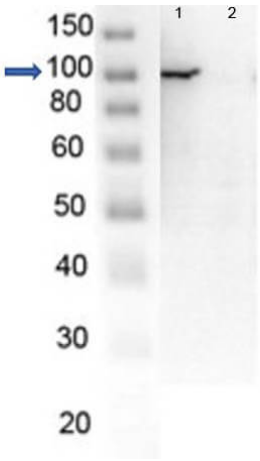
Immunohistochemistry
Immunohistochemistry with anti-PARP-1 antibody showing nuclear positivity in human lung tissue at 20x and 40x (B & C). Staining was performed on Leica Bond system using the standard protocol. Formalin fixed/paraffin embedded tissue sections were subjected to antigen retrieval and then incubated with rabbit anti-PARP-1 antibody 200-401-GM8 at 1:100 dilution for 60 minutes. Biotinylated Anti-rabbit secondary antibody was used at 1:200 dilution to detect primary antibody. The reaction was developed using streptavidin-HRP conjugated compact polymer system and visualized with chromogen substrate, 3'3-diamino-benzidine substrate (DAB). The sections were then counterstained with hematoxylin to detect cell nuclei.



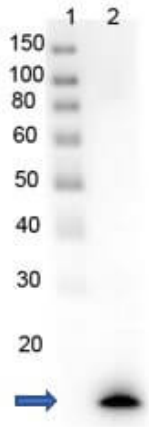
Western Blot
Western Blot of Rabbit anti-PARP1 N-term Antibody. Lane 1: Opal Pre-stained ladder (p/n MB-210-0500). Lane 2: OVCAR-8 Wild Type. Lane 3: PARP1-KO. Lane 4: PARP2-KO. Lane 5: PARP3-KO. Lane 6: PARP4-KO Lane 7: PARP5a-KO. Lane 8: PARP5b-KO. Lane 9: PARP6-KO. Lane 10: PARP7-KO. Lane 11: PARP8-KO. Lane 12: PARP9-KO. Lane 13: PARP10-KO. Lane 14: PARP12-KO. Lane 15: PARP13-KO. Lane 16: PARP14-KO. Lane 17: PARP16-KO. Load: 5.0 µg per lane. Primary antibody: PARP1 n-term antibody at 1ug/mL overnight at 4°C. Secondary antibody: Goat anti-rabbit Peroxidase secondary antibody (p/n 611-103-122) at 1:40,000 for 30 min at RT. Blocking Buffer: MB-073 for 30 min at RT. Predicted/Observed size: ~113 kDa for PARP1.



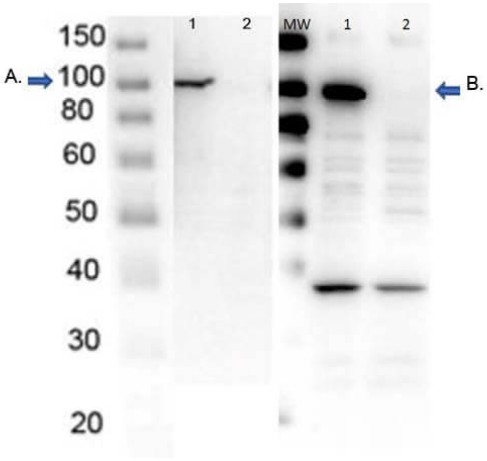
Western Blot
Western Blot of Rabbit anti-PARP1 antibody. Marker: Opal Pre-stained ladder (p/n MB-210-0500). Lane 1: HEK293 lysate (p/n W09-000-365). Lane 2: HeLa Lysate (p/n W09-000-364). Lane 3: MCF-7 Lysate (p/n W09-000-360). Lane 4: Jurkat Lysate (p/n W09-000-370). Lane 5: A431 Lysate (p/n W09-000-361). Lane 6: A549 Lysate (p/n W09-001-372). Lane 7: LNCap Lysate (p/n W09-001-GJ9). Lane 8: MOLT-4 Lysate (p/n W09-001-GK2). Lane 9: Ramos Lysate (p/n W09-000-GK4). Lane 10: Raji Lysate (p/n W09-001-368). Lane 11: A-172 Lysate (p/n W09-001-GL5). Lane 12: NIH/3T3 Lysate (p/n W10-000-358). Load: 35 µg per lane. Primary antibody: PARP1 antibody at 1ug/mL overnight at 4C. Secondary antibody: Peroxidase rabbit secondary antibody (p/n 611-103-122) at 1:30,000 for 60 min at RT. Blocking Buffer: 1% Casein-TTBS (p/n MB-082) for 30 min at RT. Predicted/Observed size: 113 kDa for PARP1.



Western Blot
Western Blot of endogenous PARP1 with Rabbit Anti-PARP1 (N-term ZF1) Antibody. Lane 1: OVCAR8 Wild Type lysate. Lane 2: OVCAR8 PARP1 KO lysate. Load: 5 µg per lane. Primary antibody: PARP1 (N-term ZF1) antibody at 1µg/mL for overnight at 4°C. Secondary antibody: HRP Gt-a-Rb IgG secondary antibody (p/n 611-103-122) at 1:40,000 for 30 min at RT. Block: MB-070 overnight at 4°C. Predicted/Observed size: 113 kDa for endogenous PARP1. Other band(s): none. Image in collaboration with Phil Lorenzi at MD Anderson.



Western Blot
Western Blot of recombinant PARP1 with rabbit anti-PARP1 (N-term ZF1) antibody. Lane 1: PARP1-Zinc Finger domain recombinant protein. Load: 0.05 µg per lane. Primary antibody: PARP1 (N-term ZF1) antibody at 1µg/mL for overnight at 4°C. Secondary antibody: HRP Gt-a-rabbit secondary antibody (p/n 611-103-122) at 1:40,000 for 30 min at RT. Block: MB-070 overnight at 4°C. Predicted/Observed size: 13 kDa for rPARP1 (N-term ZF1). Other band(s): none.



Western Blot
Western Blot of endogenous PARP1 with Rabbit Anti-PARP1 Antibodies. Lane 1: OVCAR8 Wild Type lysate. Lane 2: OVCAR8 PARP1 KO lysate. Load 5 µg per lane. Primary Antibody: Blot A: Anti-PARP1- n term (p/n 200-401-GM8); Blot B: Anti-PARP1- internal (p/n 200-401-X51) at 1µg/mL for overnight at 4°C. Secondary antibody: HRP Gt-a-Rb IgG secondary antibody (p/n 611-103-122) at 1:40,000 for 30 min at RT. Block: MB-070 overnight at 4°C. Predicted/Observed size: 113 kDa for endogenous PARP1. Other band(s): nonspecific ~ 40kDa in PARP1-AD only.

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