# abcam

## Product datasheet

## Anti-PARP1 antibody ab226978

### 3 Images

#### Overview

Product name Anti-PARP1 antibody

**Description** Rabbit polyclonal to PARP1

Host species Rabbit

Tested applications Suitable for: WB, ICC/IF

Species reactivity Reacts with: Human

**Immunogen** Synthetic peptide within Human PARP-1 (internal sequence). The exact sequence is proprietary.

Recognises both PARP-1 and cleaved Asp214.

Database link: P09874

Positive control WB: HEK-293T non-transfected and PARP1 shRNA transfected cell lysates; Cisplatin treated

HCT 116 cell lysate. ICC/IF: HeLa cells.

**General notes**The Life Science industry has been in the grips of a reproducibility crisis for a number of years.

Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

#### **Properties**

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long

term. Avoid freeze / thaw cycle.

**Storage buffer** pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 79% PBS, 20% Glycerol (glycerin, glycerine)

Purity Immunogen affinity purified

**Clonality** Polyclonal

**Isotype** IgG

#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab226978 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/500 - 1/3000. Predicted molecular weight: 113 kDa.
ICC/IF		1/100 - 1/1000.

#### **Target**

Function Involved in the base excision repair (BER) pathway, by catalyzing the poly(ADP-ribosyl)ation	n of a
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limited number of acceptor proteins involved in chromatin architecture and in DNA metabolism.

This modification follows DNA damages and appears as an obligatory step in a

detection/signaling pathway leading to the reparation of DNA strand breaks. Mediates the poly(ADP-ribosyl)ation of APLF and CHFR. Positively regulates the transcription of MTUS1 and

negatively regulates the transcription of MTUS2/TIP150.

Sequence similarities Contains 1 BRCT domain.

Contains 1 PARP alpha-helical domain. Contains 1 PARP catalytic domain. Contains 2 PARP-type zinc fingers.

Post-translational modifications

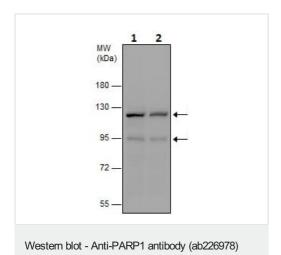
Phosphorylated by PRKDC. Phosphorylated upon DNA damage, probably by ATM or ATR. Poly-ADP-ribosylated by PARP2. Poly-ADP-ribosylation mediates the recruitment of CHD1L to

DNA damage sites.

S-nitrosylated, leading to inhibit transcription regulation activity.

Cellular localization Nucleus.

#### **Images**



All lanes: Anti-PARP1 antibody (ab226978) at 1/3000 dilution

**Lane 1 :** HEK-293T (human epithelial cell line from embryonic

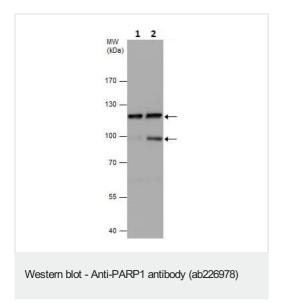
kidney transformed with large T antigen) cell lysate

**Lane 2 :** HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) transfected with PARP1

shRNA, cell lysate

Lysates/proteins at 30 µg per lane.

Predicted band size: 113 kDa



All lanes: Anti-PARP1 antibody (ab226978) at 1/1000 dilution

Lane 1 : HCT 116 (human colorectal carcinoma cell line) cell lysate

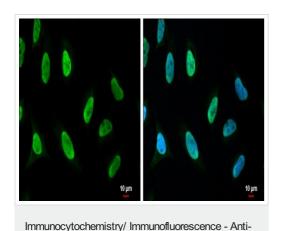
Lane 2 : HCT 116 (human colorectal carcinoma cell line) treated

with 30 µM cisplatin for 24 hours, cell lysate

Lysates/proteins at 30 µg per lane.

Predicted band size: 113 kDa

7.5% SDS-PAGE gel.



4% paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for PARP1 (green) using ab226978 at 1/500 dilution in ICC/IF. Nuclear Counterstain:

Hoechst 33342 (blue).

PARP1 antibody (ab226978)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

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