# abcam

# Product datasheet

# Anti-PARP1 antibody ab227244

★★★★★ 6 Abreviews 35 References 画像数 10

#### 製品の概要

製品名 Anti-PARP1 antibody

製品の詳細 Rabbit polyclonal to PARP1

由来種 Rabbit

アプリケーション 適用あり: ChIP, IHC-P, WB, ICC/IF, IP

種交差性 交差種: Mouse, Rat, Human

免疫原 Recombinant fragment within Human PARP1 (internal sequence). The exact sequence is

proprietary.

Database link: P09874

ポジティブ・コントロール WB: HEK-293T, NIH/3T3 and PC-12 whole cell extracts; HCT 116, HEK-293T, A431, HeLa and

HepG2 whole cell lysate (ab7900). ICC/IF: HeLa cells. ChIP: HeLa and Raji chromatin extracts.

IP: HCT 116 whole cell extract. IHC-P: HeLa xenograft tissue.

**特記事項**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

#### 製品の特性

製品の状態 Liquid

保存方法 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.

**バッファー** pH: 7.00

Preservative: 0.025% Proclin 300

Constituents: 78% PBS, 1% BSA, 20% Glycerol (glycerin, glycerine)

精製度 Immunogen affinity purified

**ポリ/モノ** ポリクローナル

アイソタイプ lgG

1

**The Abpromise guarantee Abpromise保証は、**次のテスト済みアプリケーションにおけるab227244の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

| アプリケーション | Abreviews                 | 特記事項  |
|----------|---------------------------|---|
| ChIP     |                           | Use at an assay dependent concentration.              |
| IHC-P    |                           | 1/100 - 1/1000.                                       |
| WB       | <b>★★★★☆</b> ( <u>4</u> ) | 1/500 - 1/10000. Predicted molecular weight: 113 kDa. |
| ICC/IF   | <b>★★★★★ (1)</b>          | 1/100 - 1/1000.                                       |
| IP       | <b>★★★★★ (1)</b>          | 1/100 - 1/500.  |

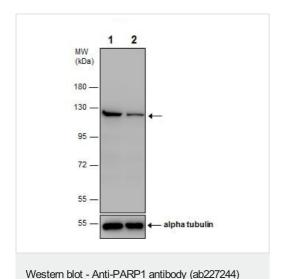
## ターゲット情報

| 機能    | Involved in the base excision repair (BER) pathway, by catalyzing the poly(ADP-ribosyl)ation of a 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. |
|-------|--|
| 配列類似性 | Contains 1 BRCT domain.  Contains 1 PARP alpha-helical domain.   |
|       | Contains 1 PARP catalytic domain.  Contains 2 PARP-type zinc fingers.  |

翻訳後修飾
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.

細胞内局在 Nucleus.

#### 画像



All lanes: Anti-PARP1 antibody (ab227244) at 1/5000 dilution

**Lane 1 :** Non-transfected HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell extract

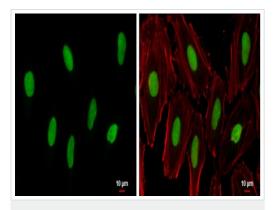
**Lane 2**: PARP1 shRNA transfected HEK-293T (human epithelial cell line from embryonic kidney transformed with large T antigen) whole cell extract

Lysates/proteins at 30 µg per lane.

### **Secondary**

All lanes: HRP-conjugated anti-rabbit lgG

Predicted band size: 113 kDa



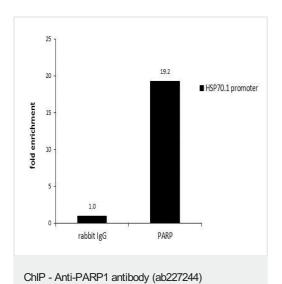
Immunocytochemistry/ Immunofluorescence - Anti-PARP1 antibody (ab227244)

7.5% SDS-PAGE gel.

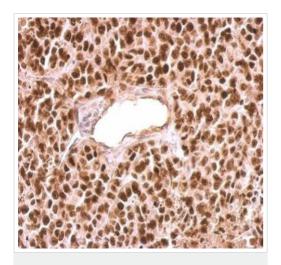
4% paraformaldehyde-fixed HeLa (human epithelial cell line from cervix adenocarcinoma) cells stained for PARP1 (green) using ab227244 at 1/500 dilution in ICC/IF.

Red: Phalloidin, a cytoskeleton marker, at 1/200 dilution.

Blue: Hoechst 33342 staining.



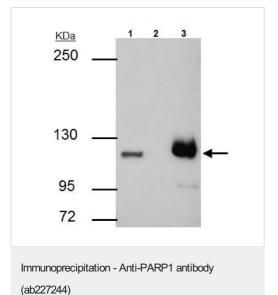
ChIP was performed with HeLa chromatin extract and 5  $\mu$ g of either normal rabbit lgG or ab227244. The precipitated DNA was detected by PCR with primer set targeting to HSP70.1 promoter.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PARP1 antibody (ab227244)

Paraffin-embedded HeLa xenograft tissue stained for PARP1 using ab227244 at 1/500 dilution in immunohistochemical analysis.

Antigen Retrieval: EDTA based, pH 8.0, buffer, 15minutes.

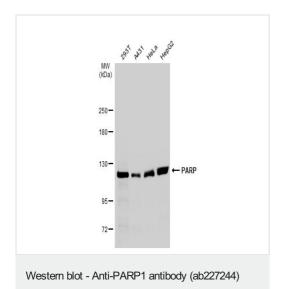


PARP1 was immunoprecipitated from HCT 116 (human colorectal carcinoma cell line) whole cell extract with 4  $\mu$ g ab227244. Western blot was performed from the immunoprecipitate using ab227244 at 1/500 dilution. Anti-Rabbit lgG was used as a secondary reagent.

Lane 1: HCT 116 whole cell extract 30 µg.

Lane 2: Control IP in HCT 116 whole cell extract with 4  $\mu g$  of preimmune Rabbit IgG.

Lane 3: ab227244 IP in HCT 116 whole cell extract.



All lanes: Anti-PARP1 antibody (ab227244) at 1/1000 dilution

Lane 1: 293T whole cell extracts

Lane 2: A431 whole cell extracts

Lane 3: HeLa whole cell extracts

Lane 4: HepG2 whole cell extracts

Lysates/proteins at 30 µg per lane.

#### Secondary

All lanes: Rabbit IgG antibody (HRP) at 1/10000 dilution

Predicted band size: 113 kDa

5% gel.

Running conditions: 80V, 15min; 140V, 40 minutes.

Transfer condition: Semi-dry, 18 V, 60 min (NC membrane).

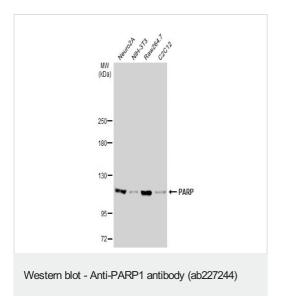
Blocking condition: 5% non-fat milk in TBST, RT, 60 minutes.

Primary antibody incubation: 4?, overnight.

Washing condition: 5 ml TBST, 4 x 5 minutes.

Exposure: chemiluminescent substrate for the detection of HRP-

conjugated antibody



All lanes: Anti-PARP1 antibody (ab227244) at 1/1000 dilution

All lanes: Neuro2A whole cell extracts

Lysates/proteins at 30 µg per lane.

#### Secondary

All lanes: Rabbit IgG antibody (HRP) at 1/10000 dilution

Predicted band size: 113 kDa

5% gel.

Running conditions: 80V, 15min; 140V, 40 minutes.

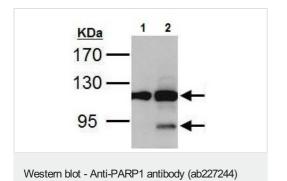
Transfer condition: Semi-dry, 18 V, 60 min (NC membrane).

Blocking condition: 5% non-fat milk in TBST, RT, 60 minutes.

Primary antibody incubation: 4?, overnight.

Washing condition: 5 ml TBST, 4 x 5 minutes.

Exposure: chemiluminescent substrate for the detection of HRP-conjugated antibody



All lanes: Anti-PARP1 antibody (ab227244) at 1/5000 dilution

Lane 1: HCT116 whole cell lysate (untreated)

Lane 2: HCT116 whole cell lysate (30 µM cisplatin treatment for 24

hours)

Lysates/proteins at 30  $\mu g$  per lane.

#### Secondary

All lanes: HRP-conjugated anti-rabbit lgG

Predicted band size: 113 kDa

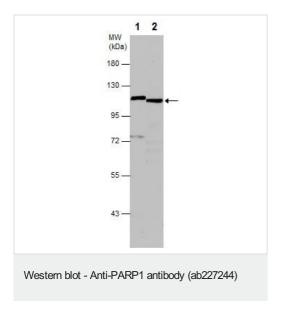
7.5% SDS-PAGE gel.

The top band is full-length and the bottom band on lane 2 is cleaved

#### PARP1.

450.0 406.09 400.0 350.0 300.0 enrichment 250.0 ■S100A9 promoter 200.0 plo 150.0 100.0 50.0 1 00 0.0 rabbit IgG PARP1 ChIP - Anti-PARP1 antibody (ab227244)

Cross-linked ChIP was performed with Raji chromatin extract and 5  $\mu$ g of either control rabbit lgG or ab227244. The precipitated DNA was detected by PCR with primer set targeting to S100A9 promoter.



All lanes: Anti-PARP1 antibody (ab227244) at 1/500 dilution

Lane 1 : NIH/3T3 (mouse embryo fibroblast cell line) whole cell extract

Lane 2 : PC-12 (rat adrenal gland pheochromocytoma cell line) whole cell extract

**Secondary** 

All lanes: HRP-conjugated anti-rabbit lgG

Predicted band size: 113 kDa

7.5% SDS-PAGE gel.

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

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