# abcam

## Product datasheet

# Anti-Cleaved PARP1 antibody [Y34] ab32561



יעלטעבע RabMAb

★★★★★ 1 Abreviews 72 References 画像数 6

#### 製品の概要

製品名 Anti-Cleaved PARP1 antibody [Y34]

製品の詳細 Rabbit monoclonal [Y34] to Cleaved PARP1

由来種 Rabbit

特異性 This antibody is specific for p85 cleaved form of PARP1.

アプリケーション 適用あり: Flow Cyt (Intra), WB, ICC/IF, IP

種交差性 交差種: Human

免疫原 Synthetic peptide within Human Cleaved PARP1 aa 200-300. The exact sequence is proprietary.

Residues following the cleavage of site.

ポジティブ・コントロール Jurkat whole cell lysate (ab7899). IP: HeLa cell lysate. ICC/IF: HeLa cells

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

#### 製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

モノクローナル ポリモノ

 クローン名
 Y34

 アイソタイプ
 IgG

#### アプリケーション

**The Abpromise guarantee** <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab32561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
Flow Cyt (Intra)		1/50. <b>ab172730</b> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
WB		1/1000. Predicted molecular weight: 85 kDa.
ICC/IF	*** <u>*</u>	Use at an assay dependent concentration.
IP		1/50.

#### 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. With EEF1A1 and TXK, forms a complex that acts as a T-helper 1 (Th1) cell-specific transcription factor and binds the promoter of IFN-gamma to directly regulate its transcription, and is thus involved importantly in Th1 cytokine production. Required for PARP9 and DTX3L recruitment to DNA damage sites. PARP1-dependent PARP9-DTX3L-mediated ubiquitination promotes the rapid and specific recruitment

of 53BP1/TP53BP1, UIMC1/RAP80, and BRCA1 to DNA damage sites.

**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 and TXK.

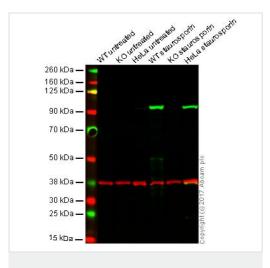
Poly-ADP-ribosylated by PARP2. Poly-ADP-ribosylation mediates the recruitment of CHD1L to

DNA damage sites.

S-nitrosylated, leading to inhibit transcription regulation activity.

**細胞内局在** Nucleus. Nucleus, nucleolus. Localizes at sites of DNA damage.

#### 画像



Western blot - Anti-Cleaved PARP1 antibody [Y34] (ab32561)



Lane 2: PARP1 (untreated) knockout HAP1 (untreated) whole cell lysate (20 µg)

Lane 3: HeLa (untreated) whole cell lysate (20 µg)

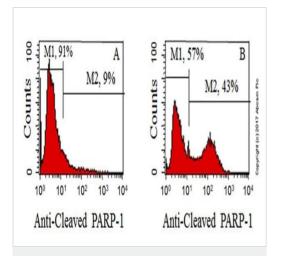
Lane 4: HAP1 (staurosporin treated, 1 u M, 4 hr) whole cell lysate (20 µg)

**Lane 5:** PARP1 (staurosporin treated, 1 uM, 4 hr) knockout HAP1 whole cell lysate (20 μg)

Lane 6: HeLa (staurosporin treated, 1 uM, 4 hr) whole cell lysate (20 µg)

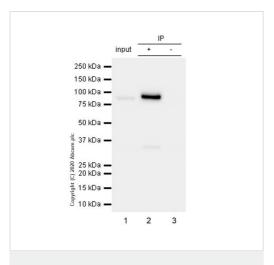
**Lanes 1 - 6:** Merged signal (red and green). Green - ab32561 observed at 100 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab32561 was shown to specifically react with PARP1 (untreated) when PARP1 (untreated) knockout samples were used. Wild-type and PARP1 (untreated) knockout samples were subjected to SDS-PAGE. Ab32561 and <u>ab8245</u> (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1000 dilution and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed <u>ab216773</u> and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed <u>ab216776</u> secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

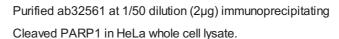


Flow Cytometry (Intracellular) - Anti-Cleaved PARP1 antibody [Y34] (ab32561)

Primary ab 1/50 dilution (0.5µg / Red). Secondary abGoat anti rabbit lgG (FITC). Secondary ab concentration 1/150 dilution. Cell line Jurkat (human acute T cell leukemia) treated with (Right) or without (Left) 4µM Camptothecin for 5h. Fixative 4% paraformaldehyde. Datasheet comment Intracellular flow cytometric analysis of apoptotic and non-apoptotic Jurkat cells using anticleaved PARP1 RabMAb (ab32561). Jurkat cells were either left untreated (A) or treated with camptothecin (4 uM, 5 hr) to induce apoptosis (B). Cells were fixed and permeabilized , and then stained with anti-cleaved PARP1. The results indicate that 43% of cells were positive for cleaved PARP1 (B, M2) after treatment, compared to 9% positive without treatment (A, M2).



Immunoprecipitation - Anti-Cleaved PARP1 antibody [Y34] (ab32561)



Lane 1 (input): HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysate 10µg

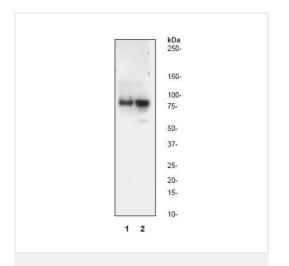
Lane 2 (+): ab32561 + HeLa whole cell lysate.

Lane 3 (-): Rabbit monoclonal lgG (<u>ab172730</u>) instead of ab32561 in HeLa whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (**ab131366**) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST. Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 85 kDa



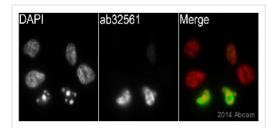
Western blot - Anti-Cleaved PARP1 antibody [Y34] (ab32561)

**All lanes :** Anti-Cleaved PARP1 antibody [Y34] (ab32561) at 1/1000 dilution

Lane 1: Un-treated Jurkat cell lysate.

Lane 2: Jurkat cell lysate treated with Camptothecin.

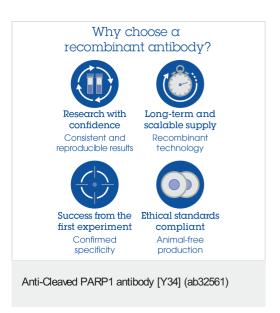
**Predicted band size:** 85 kDa **Observed band size:** 85 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Cleaved PARP1 antibody [Y34] (ab32561)

This image is courtesy of an anonymous Abreview

ab32561 staining Cleaved PARP1 in HeLa cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with formaldehyde and permeabilized with 0.5% Triton X-100 in PBS. Samples were incubated with primary antibody (1/500 in PBS) for 1 hour at 22°C. <a href="mailto:ab150081">ab150081</a>, an Alexa Fluor<sup>®</sup> 488-conjugated goat antirabbit IgG polyclonal (1/200) was used as the secondary antibody. Counterstained with DAPI.



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