# abcam

### **Product datasheet**

## Anti-Cleaved PARP1 antibody [Y34] ab32561

敲除 验证 重组 RabMAb

★★★★★ <u>1 Abreviews</u> <u>72 References</u> 6 图像

#### 概述

产 <b>品名称</b>	Anti-Cleaved PARP1 <b>抗体</b> [Y34]		
描述	兔单克隆抗体[Y34] to Cleaved PARP1		
宿主	Rabbit		
特异性	This antibody is specific for p85 cleaved form of PARP1.		
经 <b>测</b> 试应 <b>用</b>	适用于: Flow Cyt (Intra), WB, ICC/IF, IP		
<b>种属反</b> 应性	与反应: Human		
免疫原	Synthetic peptide within Human Cleaved PARP1 aa 200-300. The exact sequence is proprietary. Residues following the cleavage of site.		
<b>阳性</b> 对照	Jurkat whole cell lysate (ab7899). IP: HeLa cell lysate. ICC/IF: HeLa cells		
<b>常</b> 规说 <b>明</b>	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <li>High batch-to-batch consistency and reproducibility</li> <li>Improved sensitivity and specificity</li> <li>Long-term security of supply</li> <li>Animal-free production</li> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb<sup>®</sup> patents</u>.</li> <li>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</li> </ul>		
性能			

形式	Liquid
存 <b>放</b> 说明	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
存储溶液	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
纯 <b>度</b>	Protein A purified
克隆	单 <b>克隆</b>

#### 应用

#### The Abpromise guarantee Abpromise™承诺保证使用ab32561于以下的经测试应用

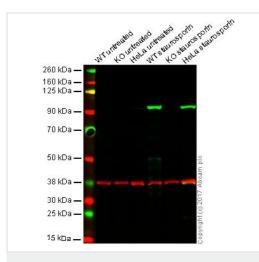
"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/50. <u>ab172730</u> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/1000. Predicted molecular weight: 85 kDa.
ICC/IF	★★★★★ <u>(1)</u>	Use at an assay dependent concentration.
IP		1/50.

<b>靶</b> 标	
功能	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.
序列相似性	Contains 1 BRCT domain. Contains 1 PARP alpha-helical domain. Contains 1 PARP catalytic domain. Contains 2 PARP-type zinc fingers.
<b>翻</b> 译后 <b>修</b> 饰	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.

Nucleus. Nucleus, nucleolus. Localizes at sites of DNA damage.

细胞定位



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

Lane 1: Wild type HAP1 (untreated) whole cell lysate (20 µg) Lane 2: PARP1 (untreated) knockout HAP1 (untreated) whole cell lysate (20 µg)

Lane 3: HeLa (untreated) whole cell lysate (20  $\mu$ g)

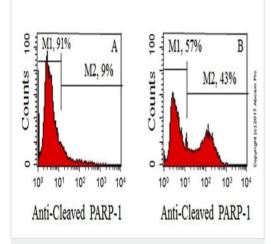
Lane 4: HAP1 (staurosporin treated, 1 u M, 4 hr) whole cell lysate (20  $\mu\text{g})$ 

Lane 5: PARP1 (staurosporin treated, 1 uM, 4 hr) knockout HAP1 whole cell lysate (20  $\mu$ g)

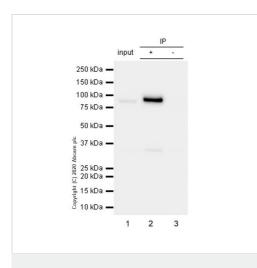
Lane 6: HeLa (staurosporin treated, 1 uM, 4 hr) whole cell lysate (20 µg)

Lanes 1 - 6: Merged signal (red and green). Green - ab32561 observed at 100 kDa. Red - loading control, <u>ab8245</u>, 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 **ab8245** (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<sup>®</sup> 800CW) preabsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.

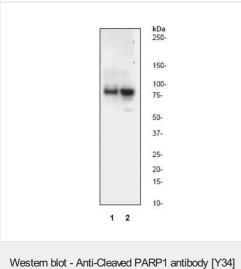


Flow Cytometry (Intracellular) - Anti-Cleaved PARP1 antibody [Y34] (ab32561) Primary ab 1/50 dilution (0.5µg / Red). Secondary abGoat anti rabbit lgG (FITC). Secondary ab concentration 1/150 dilution. Cell line Jurkat (human acute T cell leukemia) treated with (Right) or without (Left) 4µM Camptothecin 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) Purified ab32561 at 1/50 dilution (2µg) immunoprecipitating
Cleaved PARP1 in HeLa whole cell lysate.
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 (ab172730) 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

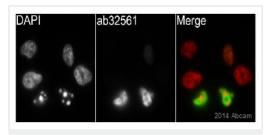


**All lanes :** Anti-Cleaved PARP1 antibody [Y34] (ab32561) at 1/1000 dilution

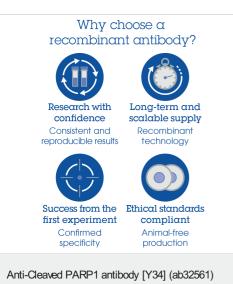
Lane 1 : Un-treated Jurkat cell lysate. Lane 2 : Jurkat cell lysate treated with Camptothecin.

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

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



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. <u>ab150081</u>, 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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