abcam

Product datasheet

Anti-PARP1 antibody [EPR18461] ab191217



★★★★ 6 Abreviews 70 References 画像数 12

製品の概要

製品名 Anti-PARP1 antibody [EPR18461]

製品の詳細 Rabbit monoclonal [EPR18461] to PARP1

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P, ICC/IF 種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール WB: HeLa and NIH/3T3 whole cell lysates; Human fetal heart and fetal kidney lysates; Mouse

heart lysate; Rat brain and heart lysates. IHC-P: Human, mouse and rat testis tissues. ICC/IF:

HeLa and NIH/3T3 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**.

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: 7.2

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol, 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル クローン名 EPR18461

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ab191217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
WB	★★★☆☆(3)	1/1000. Detects a band of approximately 113, 89, 55 kDa (predicted molecular weight: 113 kDa).
IHC-P	**** (1)	1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF	**** <u>(1)</u>	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.

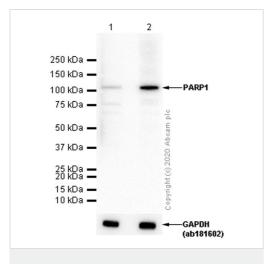
Poly-ADP-ribosylated by PARP2. Poly-ADP-ribosylation mediates the recruitment of CHD1L to

DNA damage sites.

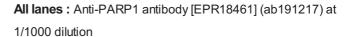
S-nitrosylated, leading to inhibit transcription regulation activity.

細胞内局在 Nucleus.

画像



Western blot - Anti-PARP1 antibody [EPR18461] (ab191217)



Lane 1: Rat brain lysates prepared in RIPA lysis method

Lane 2: Rat brain lysates prepared in 1%SDS Hot lysis method

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/20000 dilution

Predicted band size: 113 kDa



The lysates were prepared in 1%SDS Hot lysis method.

Blocking/diluting buffer & concentration: 5% NFDM/TBST

Observed MW: 112 kDa



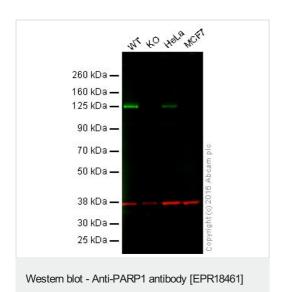
Lane 2: PARP1 knockout HAP1 whole cell lysate (20 µg)

Lane 3: HeLa whole cell lysate (20 µg)

Lane 4: MCF7 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab191217 observed at 125 kDa. Red - loading control, <u>ab8245</u>, observed at 37 kDa.

ab191217 was shown to specifically react with PARP1 when PARP1 knockout samples were used. Wild-type and PARP1 knockout samples were subjected to SDS-PAGE. ab191217 and ab8245 (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10000 dilution respectively. Blots were developed with 800CW Goat anti Rabbit and 680CW Goat anti Mouse secondary antibodies at 1/10000



(ab191217)

dilution for 1 hour at room temperature before imaging.

Secondary antibody only control

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

[EPR18461] (ab191217)

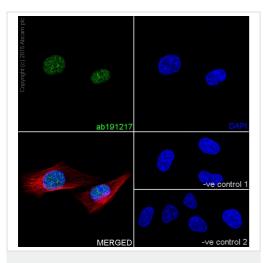
Immunohistochemical analysis of paraffin-embedded Human testis tissue labeling PARP1 with ab191217 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Nucleus staining on epithelial cells and stromal cells of Human testis is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-PARP1 antibody [EPR18461] (ab191217)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling PARP1 with ab191217 at 1/500 dilution, followed by Goat Anti-Rabbit lgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green).

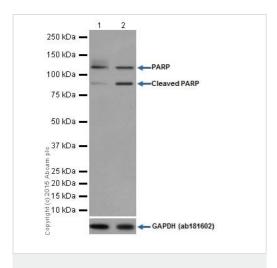
Confocal image showing nuclear staining on HeLa cell line. The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin mouse MAb (<u>ab7291</u>) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor[®] 594) (<u>ab150120</u>) secondary antibody at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab191217 at 1/500 dilution, followed by Goat Anti-Mouse lgG H&L (Alexa Fluor $^{(\!0)}$ 594) (ab150120) secondary antibody at 1/1000 dilution.

-ve control 2: Anti-alpha Tubulin mouse MAb ($\underline{ab7291}$) at 1/1000 dilution, followed by Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) ($\underline{ab150077}$) secondary antibody at 1/1000 dilution.



Western blot - Anti-PARP1 antibody [EPR18461] (ab191217)

All lanes : Anti-PARP1 antibody [EPR18461] (ab191217) at 1/10000 dilution

Lane 1 : Untreated HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysates

Lane 2: HeLa (Human epithelial cells from cervix adenocarcinoma) treated with 1uM staurosporine for 4 hours whole cell lysates

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG, (H+L), Peroxidase conjugated at 1/50000 dilution

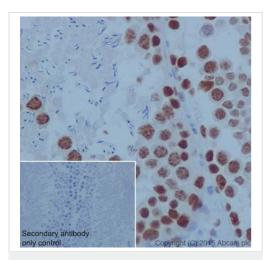
Predicted band size: 113 kDa **Observed band size:** 113,89 kDa

Exposure time: 5 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The expression profile observed is consistent with what has been described in the literature (PMID: 1536009).

The lysates were prepared in 1%SDS Hot lysis method



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PARP1 antibody
[EPR18461] (ab191217)

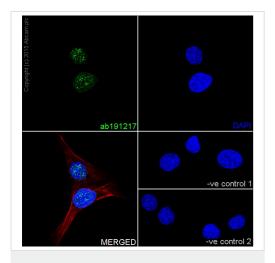
Immunohistochemical analysis of paraffin-embedded Rat testis tissue labeling PARP1 with ab191217 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution.

Nucleus staining on epithelial cells and stromal cells of rat testis is observed.

Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunocytochemistry/ Immunofluorescence - Anti-PARP1 antibody [EPR18461] (ab191217)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (Mouse embryonic fibroblast cells) cells labeling PARP1 with ab191217 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (Alexa Fluor[®] 488) (ab150077) secondary antibody at 1/1000 dilution (green).

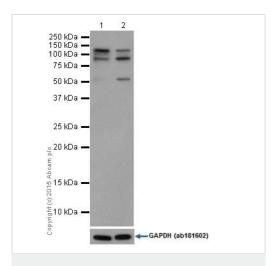
Confocal image showing nuclear staining on NIH/3T3 cell line. The nuclear counterstain is DAPI (blue).

Tubulin is detected with Anti-alpha Tubulin mouse MAb (<u>ab7291</u>) at 1/1000 dilution, followed by Goat Anti-Mouse IgG H&L (Alexa Fluor[®] 594) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab191217 at 1/500 dilution, followed by Goat Anti-Mouse $\lg G$ H&L (Alexa Fluor $^{\otimes}$ 594) at 1/1000 dilution.

-ve control 2: Anti-alpha Tubulin mouse MAb (ab7291) at 1/1000 dilution, followed by Goat Anti-Rabbit lgG H&L (Alexa Fluor® 488) (ab150077) secondary antibody at 1/1000 dilution.



Western blot - Anti-PARP1 antibody [EPR18461] (ab191217)

All lanes : Anti-PARP1 antibody [EPR18461] (ab191217) at 1/10000 dilution

Lane 1 : Untreated NIH/3T3 (Mouse embryonic fibroblast cells) whole cell lysates

Lane 2: NIH/3T3 (Mouse embryonic fibroblast cells) treated with 1uM staurosporine for 4 hours whole cell lysates

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/50000 dilution

Predicted band size: 113 kDa

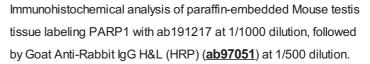
Observed band size: 113,55,89 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

The expression profile observed is consistent with what has been described in the literature (PMID: 1536009).

The lysates were prepared in 1%SDS Hot lysis method

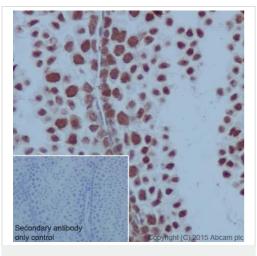


Nucleus staining on epithelial cells and stromal cells of mouse testis is observed.

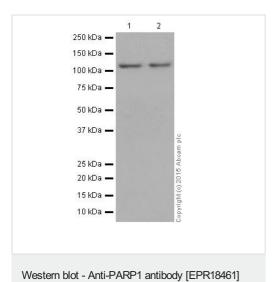
Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

Perform heat mediated antigen retrieval with EDTA buffer pH 9 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PARP1 antibody
[EPR18461] (ab191217)



(ab191217)

(ab191217)

All lanes: Anti-PARP1 antibody [EPR18461] (ab191217) at 1/1000 dilution

Lane 1: Human fetal heart lysate Lane 2: Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

Secondary

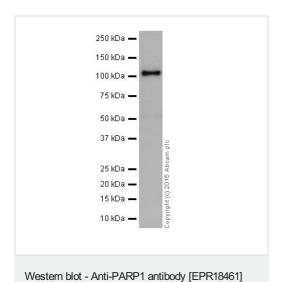
All lanes: Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/50000 dilution

Predicted band size: 113 kDa Observed band size: 113 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The lysates were prepared in 1%SDS Hot lysis method



Anti-PARP1 antibody [EPR18461] (ab191217) at 1/1000 dilution + Mouse heart lysate at 10 µg

Secondary

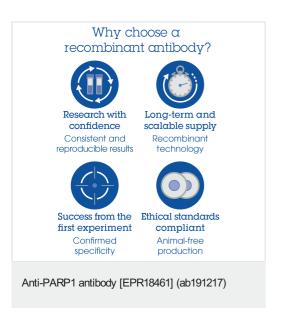
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/50000 dilution

Predicted band size: 113 kDa Observed band size: 113 kDa

Exposure time: 1 minute

Blocking/Dilution buffer: 5% NFDM/TBST.

The lysates were prepared in 1%SDS Hot lysis method



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