abcam

Product datasheet

# Anti-FANCA/FAA antibody [EPR16519] ab201457

KO 評価済 リコンビナント RabMAb

3 References 画像数 6

## 製品の概要

| | |
|---|---|
| **製品名** | Anti-FANCA/FAA antibody [EPR16519] |
| **製品の詳細** | Rabbit monoclonal [EPR16519] to FANCA/FAA |
| **由来種** | Rabbit |
| **アプリケーション** | **適用あり:** IP, WB |
| **種交差性** | **交差種:** Human |
| **免疫原** | Recombinant fragment. This information is proprietary to Abcam and/or its suppliers. |
| **ポジティブ・コントロール** | WB: HeLa, HEK-293, A431, A549, HAP1 and Jurkat whole cell lysates; Human colon lysate. IP: HeLa whole cell lysate. |
| **特記事項** | This product is a recombinant monoclonal antibody, which offers several advantages including:<br>- High batch-to-batch consistency and reproducibility<br>- Improved sensitivity and specificity<br>- Long-term security of supply<br>- Animal-free production<br>For more information **see here**.<br>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<br>Preservative: 0.01% Sodium azide<br>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 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** | EPR16519 |
| **アイソタイプ** | IgG |

## アプリケーション

**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ab201457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 |
|---|---|---|
| **IP** | | 1/30. |
| **WB** | | 1/1000. Detects a band of approximately 163 kDa (predicted molecular weight: 163 kDa). |

## ターゲット情報

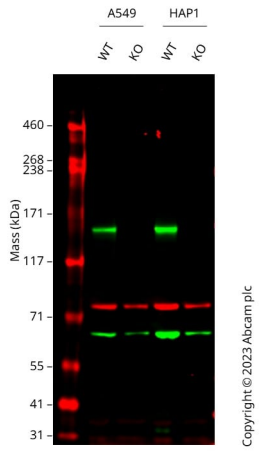
**機能** DNA repair protein that may operate in a postreplication repair or a cell cycle checkpoint function. May be involved in interstrand DNA cross-link repair and in the maintenance of normal chromosome stability.

**関連疾患** Defects in FANCA are a cause of Fanconi anemia (FA) [MIM:227650]. FA is a genetically heterogeneous, autosomal recessive disorder characterized by progressive pancytopenia, a diverse assortment of congenital malformations, and a predisposition to the development of malignancies. At the cellular level it is associated with hypersensitivity to DNA-damaging agents, chromosomal instability (increased chromosome breakage), and defective DNA repair.

**翻訳後修飾** Phosphorylated upon DNA damage, probably by ATM or ATR. Phosphorylation is required for the formation of the nuclear complex. Not phosphorylated in cells derived from groups A, B, C, E, F, G, and H.

**細胞内局在** Nucleus. Cytoplasm. The major form is nuclear. The minor form is cytoplasmic.

## 画像




Western blot - Anti-FANCA/FAA antibody [EPR16519] (ab201457)

**All lanes :** Anti-FANCA/FAA antibody [EPR16519] (ab201457) at 1/1000 dilution

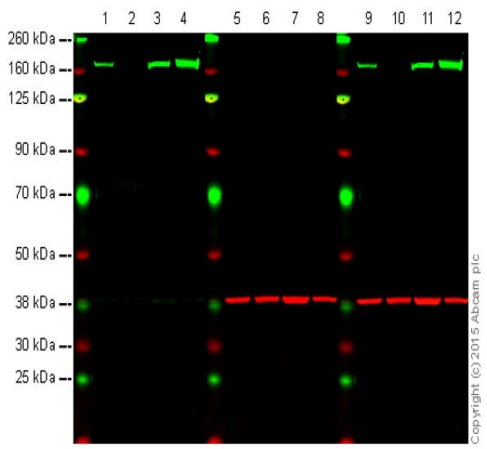
**Lane 1 :** Wild-type A549 cell lysate
**Lane 2 :** FANCA knockout A549 cell lysate
**Lane 3 :** Wild-type HAP1 cell lysate
**Lane 4 :** FANCA knockout HAP1 cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 163 kDa
**Observed band size:** 163 kDa

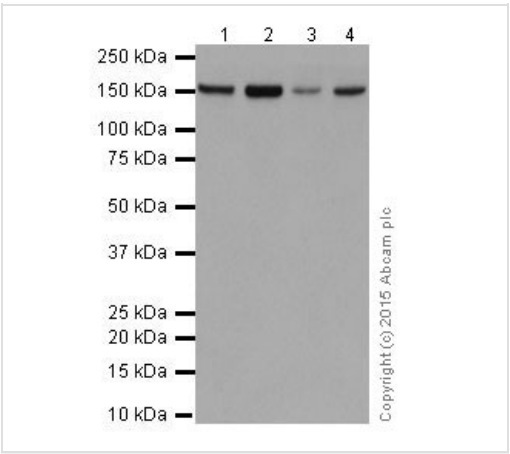
Western blot: Anti-FANCA antibody [EPR16519] (ab201457) staining at 1/1000 dilution, shown in green; Mouse anti-CANX [CANX/1543] (**ab238078**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab201457 was shown to bind specifically to FANCA. A band was observed at 163 kDa in wild-type A549 cell lysates with no signal observed at this size in FANCA knockout cell line. To generate this image, wild-type and FANCA knockout A549 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3% milk in TBS-0.1% Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4°C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.




Western blot - Anti-FANCA/FAA antibody [EPR16519] (ab201457)

**Lanes 1, 5 and 9**: Wild-type HAP1 cell lysate (20 µg)
**Lanes 2, 6 and 10**: FANCA/FAA beta knockout HAP1 cell lysate (20 µg)
**Lanes 3, 7 and 11**: HeLa cell lysate (20 µg)
**Lanes 4, 8 and 12**: HEK293 cell lysate (20 µg)
**Lanes 1, 2, 3 and 4**: Green signal from target – ab201457 observed at 163 kDa
**Lanes 5, 6, 7 and 8**: Red signal from loading control – **ab8245** observed at 37 kDa
**Lanes 9, 10, 11 and 12**: Merged (red and green) signal

ab201457 was shown to specifically react with FANCA/FAA beta when FANCA/FAA beta knockout samples were used. Wild-type and FANCA/FAA beta knockout samples were subjected to SDS-PAGE. ab201457 and **ab8245** (loading control to GAPDH) were diluted 1/10000 and 1/2000 respectively and incubated overnight at 4ºC. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed **ab216773** and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed **ab216776** secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.




Western blot - Anti-FANCA/FAA antibody [EPR16519] (ab201457)

**All lanes :** Anti-FANCA/FAA antibody [EPR16519] (ab201457) at 1/10000 dilution

**Lane 1 :** HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate
**Lane 2 :** HEK-293 (Human epithelial cells from embryonic kidney) whole cell lysate
**Lane 3 :** Jurkat (Human T cell leukemia cells from peripheral blood) whole cell lysate
**Lane 4 :** A431 (Human epidermoid carcinoma) whole cell lysate

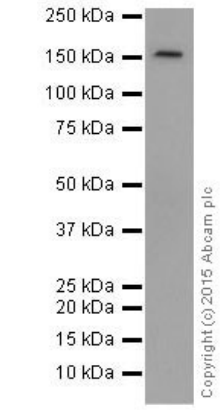
Lysates/proteins at 20 µg per lane.

**Secondary**
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 163 kDa
**Observed band size:** 163 kDa

**Exposure time:** 1 minute

Blocking/Dilution buffer: 5% NFDM/TBST.




Western blot - Anti-FANCA/FAA antibody [EPR16519] (ab201457)

Anti-FANCA/FAA antibody [EPR16519] (ab201457) at 1/1000 dilution + Human colon lysate at 10 µg

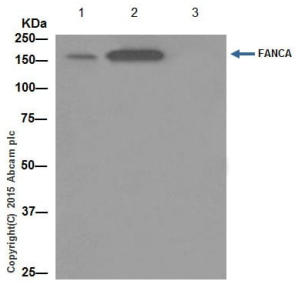
**Secondary**

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

**Predicted band size:** 163 kDa
**Observed band size:** 163 kDa

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.




Immunoprecipitation - Anti-FANCA/FAA antibody [EPR16519] (ab201457)

FANCA/FAA was immunoprecipitated from 1mg of HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate with ab201457 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab201457 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (**ab131366**), was used for detection at 1/1500 dilution.

Lane 1: HeLa whole cell lysate 10 µg (Input). Lane 2: ab201457 IP in HeLa whole cell lysate. Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab201457 in HeLa whole cell lysate. Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 30 seconds.


Anti-FANCA/FAA antibody [EPR16519] (ab201457)

**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 **https://www.abcam.co.jp/abpromise** or contact our technical team.

## Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors