

Product datasheet

Anti-FANCA/FAA antibody [EPR16519] ab201457

KO **VALIDATED** Recombinant **RabMAb**

1 References 5 Images

Overview

Product name	Anti-FANCA/FAA antibody [EPR16519]
Description	Rabbit monoclonal [EPR16519] to FANCA/FAA
Host species	Rabbit
Tested applications	Suitable for: IP, WB
Species reactivity	Reacts with: Human
Immunogen	Recombinant fragment within Human FANCA/FAA aa 1-150. The exact sequence is proprietary. Database link: O15360
Positive control	WB: HeLa, HEK-293, A431 and Jurkat whole cell lysates; Human colon lysate. IP: HeLa whole cell lysate.
General notes	

This product was previously labelled as FANCA

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](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

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, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR16519
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab201457** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		1/30.
WB		1/1000. Detects a band of approximately 163 kDa (predicted molecular weight: 163 kDa).

Target

Function	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.
Involvement in disease	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.

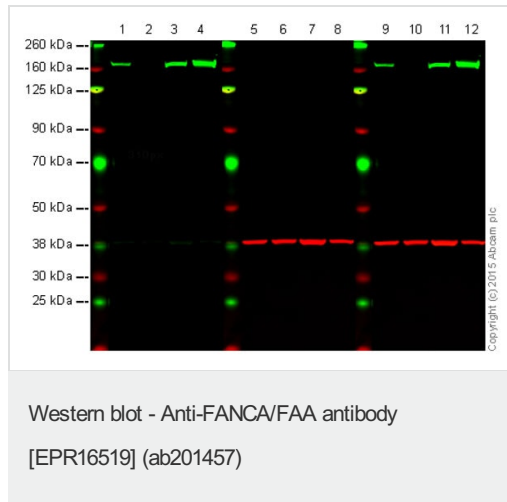
Post-translational modifications

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.

Cellular localization

Nucleus. Cytoplasm. The major form is nuclear. The minor form is cytoplasmic.

Images



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)

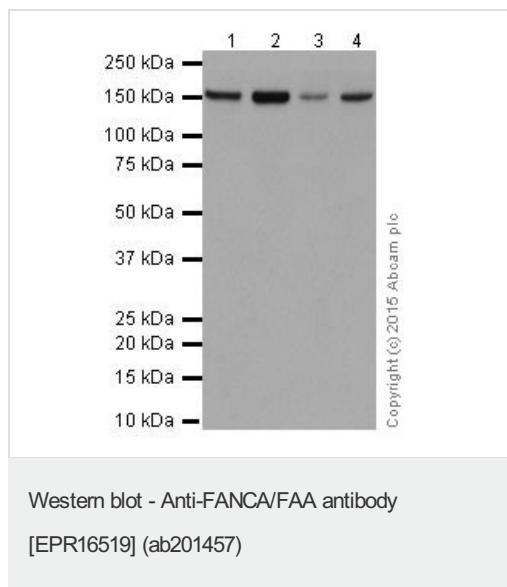
Lanes 4, 8 and 12: HEK293 cell lysate (20 µg)

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 4°C. 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.



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.

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

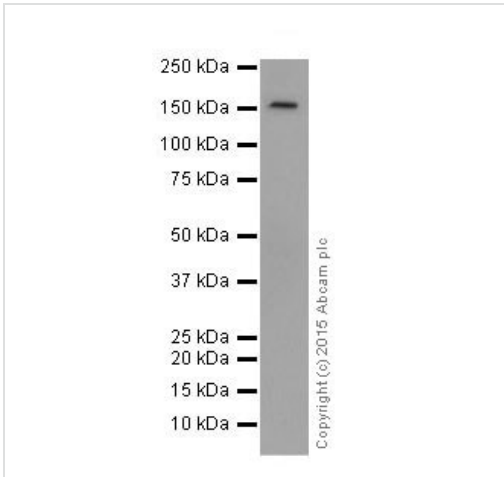
Blocking/Dilution buffer: 5% NFDm/TBST.

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.

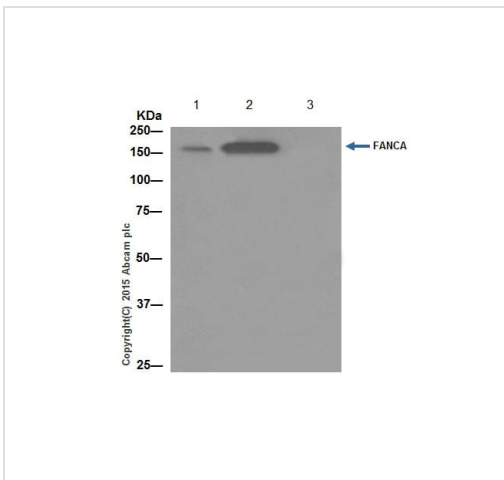
Lane 1: HeLa whole cell lysate 10 µg (Input). Lane 2: ab201457 IP in HeLa whole cell lysate. Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab201457 in HeLa whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDm/TBST.

Exposure time: 30 seconds.







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



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

Why choose a recombinant antibody?

 Research with confidence Consistent and reproducible results	 Long-term and scalable supply Recombinant technology
 Success from the first experiment Confirmed specificity	 Ethical standards compliant Animal-free production

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

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

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