abcam

Product datasheet

Anti-FANCA/FAA antibody [EPR16519-42] - BSA and Azide free ab251345

KO VALIDATED Recombinant RabMAb

4 Images

Overview

Product name	Anti-FANCA/FAA antibody [EPR16519-42] - BSA and Azide free
Description	Rabbit monoclonal [EPR16519-42] to FANCA/FAA - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB
Species reactivity	**Reacts with:** Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
General notes	ab251345 is the carrier-free version of **ab201458**. Our **carrier-free** antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency. This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications. Use our **conjugation kits** for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold. This product is compatible with the Maxpar® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® is a trademark of Fluidigm Canada Inc. 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**.

Properties

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Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR16519-42
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab251345 in the following tested applications.

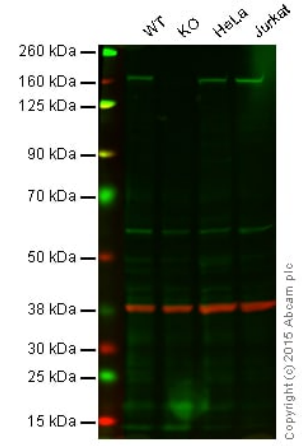
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. 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



Western blot - Anti-FANCA/FAA antibody [EPR16519-42] - BSA and Azide free (ab251345)

This data was developed using **ab201458**, the same antibody clone in a different buffer formulation.

Lane 1 Wild-type HAP1 cell lysate (20 µg)

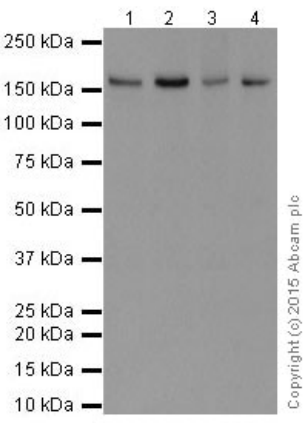
Lane 2 ProteinX knockout HAP1 cell lysate (20 µg)

Lane 3 HeLa cell lysate (20 µg)

Lane 4 Jurkat cell lysate (20 µg)

Lanes 1 - 4 Merged signal (red and green). Green - **ab201458** observed at 163 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab201458 was shown to recognize FANCA/FAA when FANCA/FAA knockout samples were used, along with additional cross-reactive bands. Wild-type and FANCA/FAA knockout samples were subjected to SDS-PAGE. **ab201458** and **ab8245** (loading control to GAPDH) were diluted 1/10 000 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 1/10 000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-FANCA/FAA antibody [EPR16519-42] - BSA and Azide free (ab251345)

All lanes : Anti-FANCA/FAA antibody [EPR16519-42] (**ab201458**) at 1/10000 dilution

Lane 1 : HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate
Lane 2 : 293 (Human 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

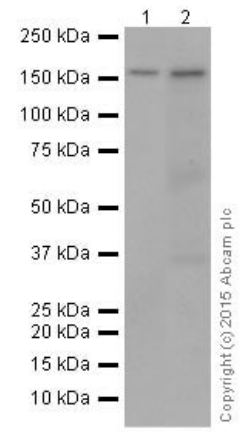
Predicted band size: 163 kDa

Observed band size: 163 kDa

Exposure time: 1 minute

This data was developed using **ab201458**, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-FANCA/FAA antibody [EPR16519-42] - BSA and Azide free (ab251345)

All lanes : Anti-FANCA/FAA antibody [EPR16519-42] (**ab201458**) at 1/1000 dilution

Lane 1 : Human colon tissue lysate
Lane 2 : Human fetal kidney tissue lysate

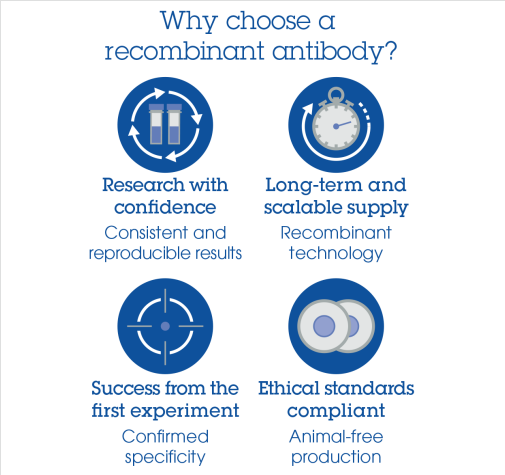
Lysates/proteins at 10 µg per lane.

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

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

Exposure time: 3 minutes

This data was developed using **ab201458**, the same antibody clone in a different buffer formulation.



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