abcam

Product datasheet

Anti-SLC27A4 / FATP4 antibody [EPR17319] - C-terminal ab199719



Recombinant

RabMAb

★★★★★ 1 Abreviews 7 References 8 Images

Overview

Product name Anti-SLC27A4 / FATP4 antibody [EPR17319] - C-terminal

Description Rabbit monoclonal [EPR17319] to SLC27A4 / FATP4 - C-terminal

Host species Rabbit

Tested applications Suitable for: ICC/IF, IP, IHC-P, WB

Species reactivity Reacts with: Human

Immunogen Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

Positive control WB: HeLa, HEK293 and HepG2 whole cell lysates; Human fetal brain and Human fetal kidney

lysates. IHC-P: Human kidney tissue. ICC/IF: HepG2 cells. IP: HEK293 whole cell lysate.

General notesThis 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

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, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EPR17319

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Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab199719 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
ICC/IF		1/100.
IP		1/50.
IHC-P		1/50. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB	****(1)	1/2000. Detects a band of approximately 72 kDa (predicted molecular weight: 72 kDa).

Target

Relevance

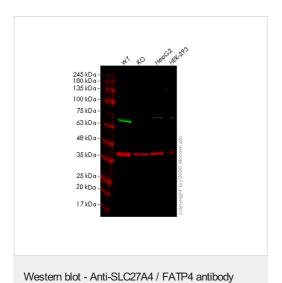
SLC27A4 / FATP4 plays a role in the transport of long chain fatty acids across the plasma membrane. It has acyl-coA ligase activity for long chain and very long chain fatty acids. Deletion of the SLC27A4 gene results in embryonic lethality, which is attributed to the need for fat absorption across the visceral endoderm early in embryonic development. Expression of FAT4P in the intestinal lining is thought to be altered in response to dietary fat.

All lanes: Anti-SLC27A4 / FATP4 antibody [EPR17319] - C-

Cellular localization

Cell Membrane

Images



[EPR17319] - C-terminal (ab199719)

Lysates/proteins at 20 µg per lane.

terminal (ab199719) at 1/1000 dilution

Lane 1: Wild-type HEK293T cell lysate

Lane 2: SLC27A4 knockout HEK293T cell lysate

Lane 3: HepG2 cell lysate

Lane 4: HEK-293 cell lysate

Secondary

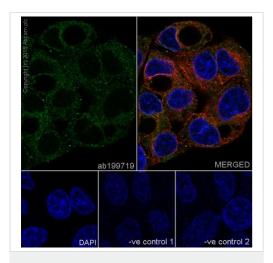
All lanes : Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) at 1/10000 dilution

Predicted band size: 72 kDa

Observed band size: 72 kDa

Lanes 1-4: Merged signal (red and green). Green - ab199719 observed at 72 kDa. Red - loading control **ab8245** observed at 36 kDa.

ab199719 Anti-SLC27A4 / FATP4 antibody [EPR17319] - C-terminal was shown to specifically react with SLC27A4 / FATP4 in wild-type HEK293T cells. Loss of signal was observed when knockout cell line ab266114 (knockout cell lysate ab257677) was used. Wild-type and SLC27A4 / FATP4 knockout samples were subjected to SDS-PAGE. ab199719 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at 1 in 1000 dilution and 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

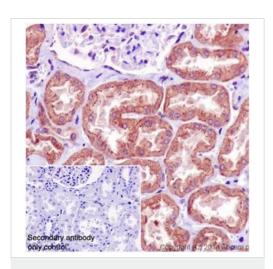


Immunocytochemistry/ Immunofluorescence - Anti-SLC27A4 / FATP4 antibody [EPR17319] - Cterminal (ab199719)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma) cells labeling SLC27A4 / FATP4 with ab199719 at 1/100 dilution, followed by Goat anti-rabbit lgG (Alexa Fluor® 488) (ab150077) secondary antibody at 1/500 dilution (green). Cytoplasm staining on HepG2 cell line is observed. The nuclear counterstain is DAPI (blue). Tubulin is detected with ab7291 (anti-Tubulin mouse mAb) at 1/1000 dilution and ab150120 (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).

The negative controls are as follows:-

-ve control 1: ab199719 at 1/100 dilution followed by <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution. -ve control 2: <u>ab7291</u> (anti-Tubulin mouse mAb) at 1/1000 dilution followed by <u>ab150077</u> (Alexa Fluor®488 Goat Anti-Rabbit lgG H&L) at 1/500 dilution.

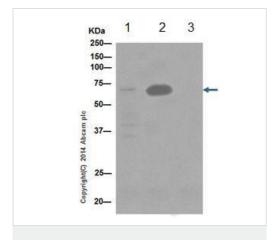


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-SLC27A4 / FATP4 antibody [EPR17319] - C-terminal (ab199719)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling SLC27A4 / FATP4 with ab199719 at 1/100 dilution followed by Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/500 dilution. Cytoplasm staining on Human kidney tissue is observed. Counter stained with Hematoxylin.

Negative control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051).

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

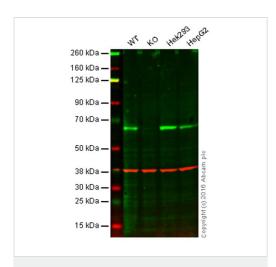


Immunoprecipitation - Anti-SLC27A4 / FATP4 antibody [EPR17319] - C-terminal (ab199719)

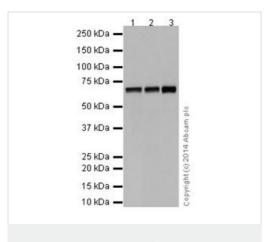
SLC27A4 / FATP4 was immunoprecipitated from 1mg of HEK293 (Human embryonic kidney) whole cell lysate with ab199719 at 1/50 dilution. Western blot was performed from the immunoprecipitate using ab199719 at 1/5000 dilution. Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG, was used as secondary antibody at 1/1500 dilution.

Lane 1: HEK293 whole cell lysate 10µg (Input). Lane 2: HEK293 whole cell lysate following IP. Lane 3: Rabbit monoclonal IgG (ab172730) instead of ab199719 in HEK293 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST. Exposure is 3 minutes.



Western blot - Anti-SLC27A4 / FATP4 antibody [EPR17319] - C-terminal (ab199719)



Western blot - Anti-SLC27A4 / FATP4 antibody [EPR17319] - C-terminal (ab199719)

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

Lane 2: SLC27A4/FATP4 knockout HAP1 cell lysate (20 µg)

Lane 3: HEK293 cell lysate (20 µg)

Lane 4: HepG2 cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab199719 observed at 70 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab199719 was shown to specifically react with SLC27A4/FATP4 when SLC27A4/FATP4 knockout samples were used. Wild-type and SLC27A4/FATP4 knockout samples were subjected to SDS-PAGE. ab199719 and **ab8245** (loading control to GAPDH) were diluted 1/2000 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse lgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.

All lanes : Anti-SLC27A4 / FATP4 antibody [EPR17319] - C-terminal (ab199719) at 1/10000 dilution

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

Lane 2: HepG2 (Human liver hepatocellular carcinoma) whole cell lysate

Lane 3: HEK293 (Human embryonic kidney) whole cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

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

Predicted band size: 72 kDa
Observed band size: 72 kDa

Exposure time: 1 minute

Blocking/dilution buffer: 5% NFDM/TBST.

All lanes : Anti-SLC27A4 / FATP4 antibody [EPR17319] - C-terminal (ab199719) at 1/2000 dilution

Lane 1 : Human fetal brain

Lane 2 : Human fetal kidney

Lysates/proteins at 10 µg per lane.

Secondary

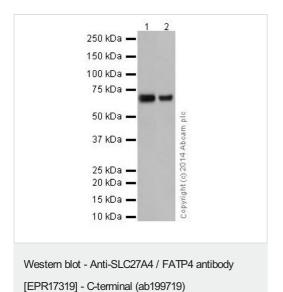
All lanes: Anti-Rabbit IgG (HRP), specific to the non-reduced form

of IgG at 1/1000 dilution

Predicted band size: 72 kDa **Observed band size:** 72 kDa

Exposure time: 1 minute

Blocking/dilution buffer: 5% NFDM/TBST.



Why choose a recombinant antibody? Research with Long-term and confidence scalable supply Consistent and Recombinant reproducible results technology Success from the Ethical standards first experiment compliant Confirmed Animal-free Anti-SLC27A4 / FATP4 antibody [EPR17319] - Cterminal (ab199719)

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

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