abcam

ab200353

Anti-SLC27A4 / FATP4 antibody [EPR17319-26]

Recombinant | RabMAb | KO Validated | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	EPR17319-26
Purification technique	Affinity purification Protein A
Concentration	0.433 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

WB

Tested

Species	Mouse
Dilution info	1/1000
Notes	-

Species	Rat

Dilution info	1/1000
Notes	-

Species	Human
Dilution info	1/1000
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	-
Notes	-

Expected

Species	Mouse, Rat
Dilution info	Use at an assay dependent concentration.
Notes	-

Target data

See full target information SLC27A4

Function Mediates the levels of long-chain fatty acids (LCFA) in the cell by facilitating their transport across cell membranes (PubMed:10518211, PubMed:12556534, PubMed:20448275, PubMed:21395585, PubMed:22022213). Appears to be the principal fatty acid transporter in small intestinal enterocytes (PubMed:20448275). Also functions as an acyl-CoA ligase catalyzing the ATP-dependent formation of fatty acyl-CoA using LCFA and very-long-chain fatty acids (VLCFA) as substrates, which prevents fatty acid efflux from cells and might drive more fatty acid uptake (PubMed:22022213, PubMed:24269233). Plays a role in the formation of the epidermal barrier. Required for fat absorption in early embryogenesis (By similarity). Probably involved in fatty acid transport across the blood barrier (PubMed:21395585). Indirectly inhibits RPE65 via substrate competition and via production of VLCFA derivatives like lignoceroyl-CoA. Prevents light-induced degeneration of rods and cones (By similarity).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

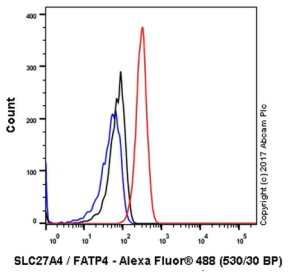
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

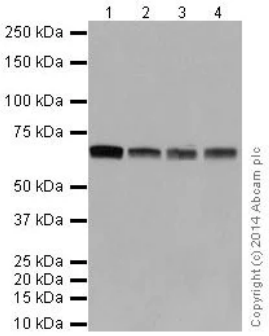
6 product images



Flow Cytometry (Intracellular) - Anti-SLC27A4 / FATP4 antibody [EPR17319-26] (ab200353)

SLC27A4 / FATP4 Flow Cytometry (Intracellular) staining using rabbit Anti-SLC27A4 / FATP4 antibody

Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling SLC27A4 / FATP4 with purified ab200353 at 1/250 dilution (10ug/ml) (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. A Goat anti rabbit IgG (Alexa Fluorr® 488) (1/2000 dilution) was used as the secondary antibody. Rabbit monoclonal IgG (Black) was used as the isotype control, cells without incubation with primary antibody and secondary antibody (Blue) were used as the unlabeled control.



Western blot - Anti-SLC27A4 / FATP4 antibody [EPR17319-26] (ab200353)

SLC27A4 / FATP4 Western blot staining using rabbit Anti-SLC27A4 / FATP4 antibody

Blocking/dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-SLC27A4 / FATP4 antibody [EPR17319-26] (ab200353) at 1/5000 dilution

Lane 1:
HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate at 20 µg

Lane 2:
HepG2 (Human liver hepatocellular carcinoma) whole cell lysate at 20 µg

Lane 3:
HEK293 (Human embryonic kidney) whole cell lysate at 20 µg

Lane 4:
Human testis lysate at 20 µg

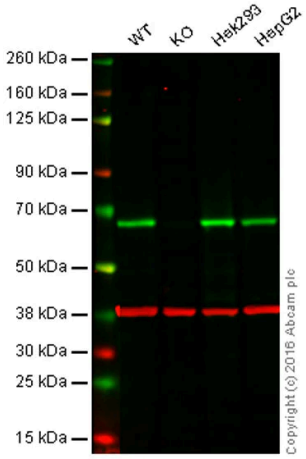
Secondary

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: 1min



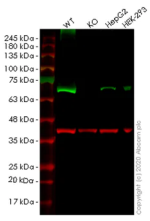
Western blot - Anti-SLC27A4 / FATP4 antibody [EPR17319-26] (ab200353)

SLC27A4 / FATP4 Western blot staining using rabbit Anti-SLC27A4 / FATP4 antibody

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: SLC27A/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 - ab200353 observed at 70 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab200353 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. ab200353 and ab8245 (loading control to GAPDH) were diluted 1/1000 and 1/10 000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) andGoat 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:
Western blot - Anti-SLC27A4 / FATP4 antibody [EPR17319-26] (ab200353)

Predicted band size: 72 kDa



Western blot - Anti-SLC27A4 / FATP4 antibody [EPR17319-26] (ab200353)

SLC27A4 / FATP4 Western blot staining using rabbit Anti-SLC27A4 / FATP4 antibody

Lanes 1-4: Merged signal (red and green). Green - ab200353 observed at 72 kDa. Red - loading control ab8245 observed at 36 kDa.
ab200353 Anti-SLC27A4 / FATP4 antibody [EPR17319-26] 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. ab200353 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 IgG H&L (IRDye® 800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

All lanes:
Western blot - Anti-SLC27A4 / FATP4 antibody [EPR17319-26] (ab200353) at 1/1000 dilution

Lane 1:
Wild-type HEK293T cell lysate at 20 µg

Lane 2:
SLC27A4 knockout HEK293T cell lysate at 20 µg

Lane 2:
Western blot - Human SLC27A4 (FATP4) knockout HEK-293T cell line (ab266114)

Lane 3:
HepG2 cell lysate at 20 µg

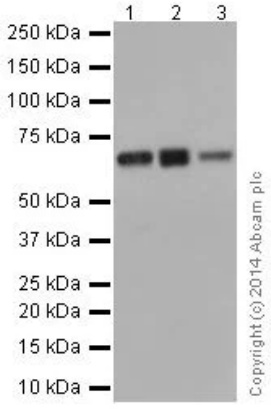
Lane 4:
HEK-293 cell lysate at 20 µg

Secondary

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

Predicted band size: 72 kDa

Observed band size: 72 kDa



Western blot - Anti-SLC27A4 / FATP4 antibody [EPR17319-26] (ab200353)

Blocking/dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-SLC27A4 / FATP4 antibody [EPR17319-26] (ab200353) at 1/1000 dilution

Lane 1:
Human fetal brain lysate at 10 µg

Lane 2:
Human fetal heart lysate at 10 µg

Lane 3:
Human fetal kidney lysate at 10 µg

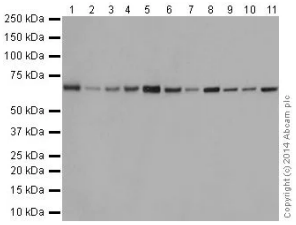
Secondary

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: 30s



Western blot - Anti-SLC27A4 / FATP4 antibody [EPR17319-26] (ab200353)

Blocking/dilution buffer: 5% NFDM/TBST.
All lanes:
Western blot - Anti-SLC27A4 / FATP4 antibody [EPR17319-26] (ab200353) at 1/1000 dilution

Lane 1:
Mouse brain lysate at 10 µg

Lane 2:
Mouse heart lysate at 10 µg

Lane 3:
Mouse kidney lysate at 10 µg

Lane 4:
Mouse spleen lysate at 10 µg

Lane 5:
Rat brain lysate at 10 µg

Lane 6:
Rat kidney lysate at 10 µg

Lane 7:
Rat spleen lysate at 10 µg

Lane 8:
C6 (Rat glial tumor cells) whole cell lysate at 10 µg

Lane 9:
RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate at 10 µg

Lane 10:
PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysate at 10 µg

Lane 11:
NIH/3T3 (Mouse embyro fibroblast cells) whole cell lysate at 10 µg

Secondary

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

Predicted band size: 72 kDa

Observed band size: 72 kDa

Exposure time: 5s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.