

## Product datasheet

### Anti-FACL4 antibody [EPR17587-42] ab205199

Recombinant RabMAb

[3 References](#) [9 Images](#)

#### Overview

<b>Product name</b>	Anti-FACL4 antibody [EPR17587-42]
<b>Description</b>	Rabbit monoclonal [EPR17587-42] to FACL4
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> Flow Cyt (Intra), IP, IHC-P, WB, ICC/IF
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: HeLa, HepG2 and 293 whole cell lysates; Human fetal brain, fetal heart and fetal brain lysates. IHC-P: Human liver carcinoma tissue. ICC/IF: HeLa and HepG2 cells. Flow Cyt (intra): HeLa cells. IP: Mouse brain whole cell lysate.
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	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.
<b>Storage buffer</b>	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR17587-42

Isotype

IgG

## Applications

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### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab205199 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
Flow Cyt (Intra)		1/120.
IP		1/40.
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
WB		1/1000. Detects a band of approximately 79 kDa (predicted molecular weight: 79 kDa).
ICC/IF		1/50.

## Target

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### Function

Activation of long-chain fatty acids for both synthesis of cellular lipids, and degradation via beta-oxidation. Preferentially uses arachidonate and eicosapentaenoate as substrates.

### Involvement in disease

Defects in ACSL4 are the cause of mental retardation X-linked type 63 (MRX63) [MIM:300387]. Mental retardation is a mental disorder characterized by significantly sub-average general intellectual functioning associated with impairments in adaptive behavior and manifested during the developmental period. Non-syndromic mental retardation patients do not manifest other clinical signs.

Defects in ACSL4 are involved in Alport syndrome with mental retardation midface hypoplasia and elliptocytosis (ATS-MR) [MIM:300194]. A X-linked contiguous gene deletion syndrome characterized by glomerulonephritis, deafness, mental retardation, midface hypoplasia and elliptocytosis.

### Sequence similarities

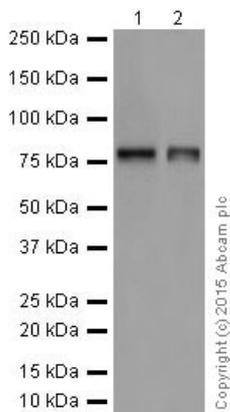
Belongs to the ATP-dependent AMP-binding enzyme family.

### Cellular localization

Mitochondrion outer membrane. Peroxisome membrane. Microsome membrane. Endoplasmic reticulum membrane.

## Images

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Western blot - Anti-FACL4 antibody [EPR17587-42] (ab205199)

**All lanes :** Anti-FACL4 antibody [EPR17587-42] (ab205199) at 1/5000 dilution

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

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

Lysates/proteins at 20 µg per lane.

#### Secondary

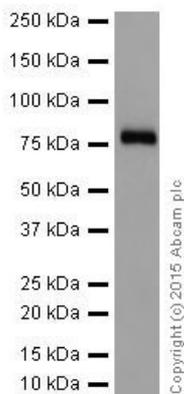
**All lanes :** Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 79 kDa

**Observed band size:** 79 kDa

**Exposure time:** 30 seconds

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-FACL4 antibody [EPR17587-42] (ab205199)

Anti-FACL4 antibody [EPR17587-42] (ab205199) at 1/5000 dilution + 293 (Human epithelial cells from embryonic kidney) whole cell lysate at 20 µg

#### Secondary

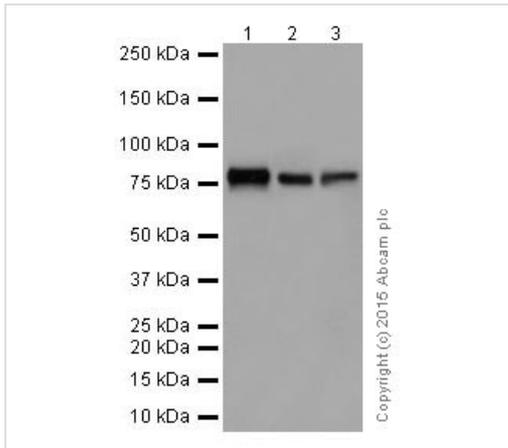
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 79 kDa

**Observed band size:** 79 kDa

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.



Western blot - Anti-FACL4 antibody [EPR17587-42] (ab205199)

**All lanes** : Anti-FACL4 antibody [EPR17587-42] (ab205199) at 1/1000 dilution

**Lane 1** : Human fetal brain lysate

**Lane 2** : Human fetal heart lysate

**Lane 3** : Human fetal kidney lysate

Lysates/proteins at 10 µg per lane.

### Secondary

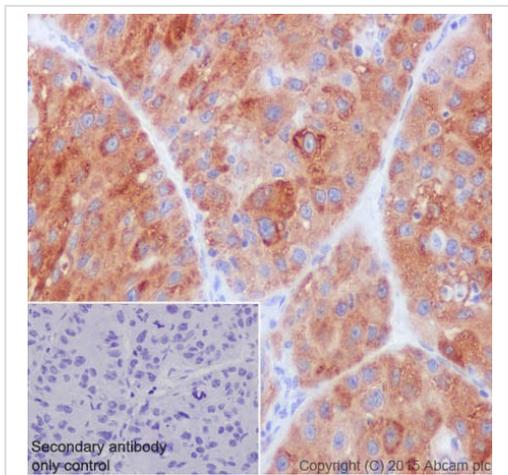
**All lanes** : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

**Predicted band size:** 79 kDa

**Observed band size:** 79 kDa

**Exposure time:** 1 minute

Blocking/Dilution buffer: 5% NFDm/TBST.

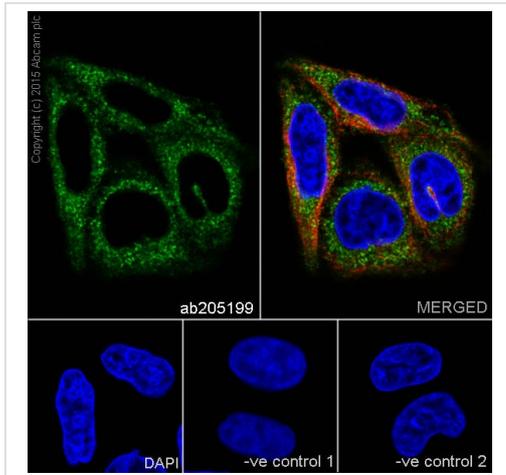


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FACL4 antibody [EPR17587-42] (ab205199)

Immunohistochemical analysis of paraffin-embedded Human liver carcinoma tissue labeling FACL4 with ab205199 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) secondary antibody at 1/500 dilution. Cytoplasmic staining on Human hepatocellular carcinoma tissue is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/500 dilution.

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

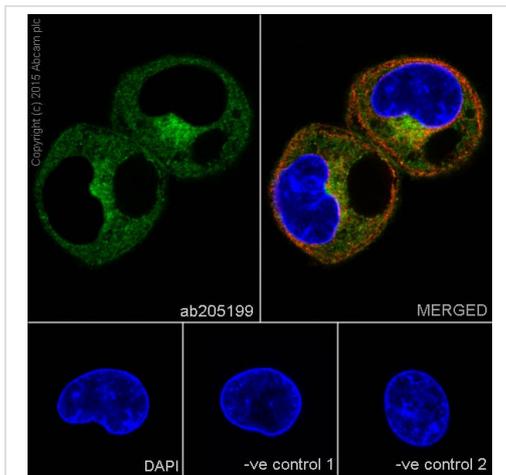


Immunocytochemistry/ Immunofluorescence - Anti-FACL4 antibody [EPR17587-42] (ab205199)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling FACL4 with ab205199 at 1/50 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on HeLa cell line. The nuclear counter stain 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 1/1000 dilution (red).

The negative controls are as follows;

-ve control 1: ab205199 at 1/50 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.  
 -ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.

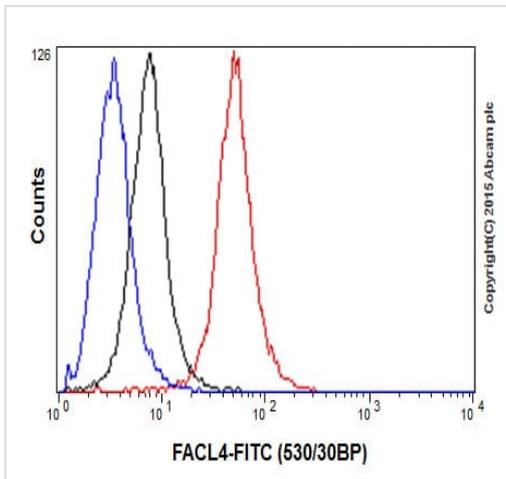


Immunocytochemistry/ Immunofluorescence - Anti-FACL4 antibody [EPR17587-42] (ab205199)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma) cells labeling FACL4 with ab205199 at 1/50 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing cytoplasmic staining on HepG2 cell line. The nuclear counter stain 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 1/1000 dilution (red).

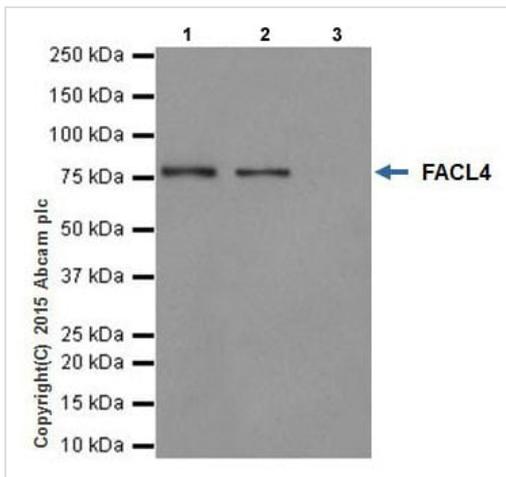
The negative controls are as follows;

-ve control 1: ab205199 at 1/50 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.  
 -ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.



Flow Cytometry (Intracellular) - Anti-FACL4 antibody  
[EPR17587-42] (ab205199)

Intracellular flow cytometric analysis of 4% paraformaldehyde-fixed HeLa (Human epithelial cells from cervix adenocarcinoma) cells labeling FACL4 with ab205199 at 1/120 dilution (red) compared with a rabbit monoclonal IgG isotype control (**ab172730**; black) and an unlabelled control (cells without incubation with primary antibody and secondary antibody; blue). Goat anti rabbit IgG (FITC) at 1/500 dilution was used as the secondary antibody.



Immunoprecipitation - Anti-FACL4 antibody  
[EPR17587-42] (ab205199)

FACL4 was immunoprecipitated from 1mg of Mouse brain whole cell lysate with ab205199 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab205199 at 1/1000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution.

Lane 1: Mouse brain whole cell lysate 10 µg (Input). Lane 2: ab205199 IP in Mouse brain whole cell lysate. Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab205199 in Mouse brain whole cell lysate

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

Exposure time: 8 seconds

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-FACL4 antibody [EPR17587-42] (ab205199)

**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

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- 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.com/abpromise> or contact our technical team.

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