abcam

Product datasheet

Anti-FACL4 antibody [EPR17587-42] - BSA and Azide free ab251419

Recombinant RabMAb

9 Images

Overview

Product name	Anti-FACL4 antibody [EPR17587-42] - BSA and Azide free
Description	Rabbit monoclonal [EPR17587-42] to FACL4 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** WB, IP, IHC-P, Flow Cyt (Intra), ICC/IF
Species reactivity	**Reacts with:** Mouse, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
General notes	ab251419 is the carrier-free version of **ab205199**. 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

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
Clonality	Monoclonal
Clone number	EPR17587-42
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab251419 in the following tested applications.

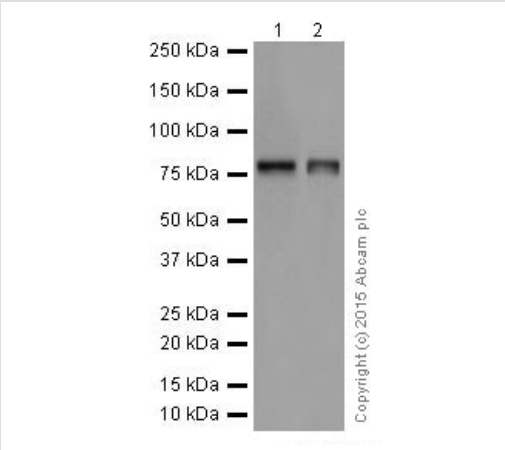
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 79 kDa (predicted molecular weight: 79 kDa).
IP		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
Flow Cyt (Intra)		Use at an assay dependent concentration.
ICC/IF		Use at an assay dependent concentration.

Target

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 adaptative 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



Western blot - Anti-FACL4 antibody [EPR17587-42] - BSA and Azide free (ab251419)

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.

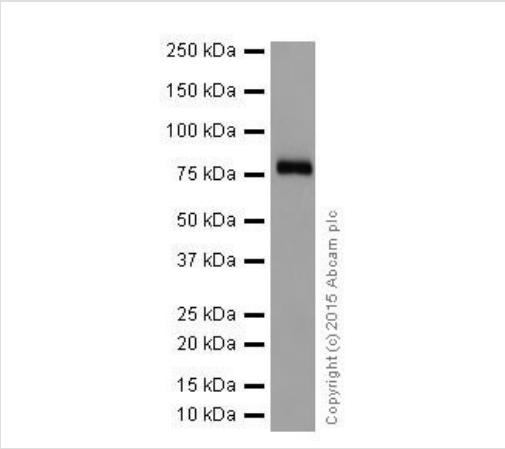
Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 79 kDa
Observed band size: 79 kDa

Exposure time: 30 seconds

This data was developed using **ab205199**, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-FACL4 antibody [EPR17587-42] - BSA and Azide free (ab251419)

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

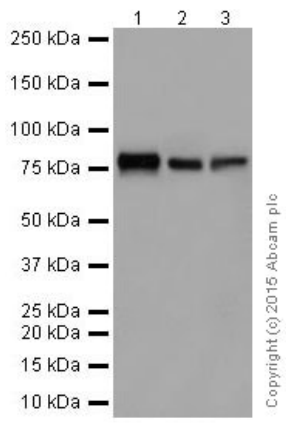
Secondary
Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 79 kDa
Observed band size: 79 kDa

Exposure time: 3 minutes

This data was developed using **ab205199**, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-FACL4 antibody [EPR17587-42] - BSA and Azide free (ab251419)

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.

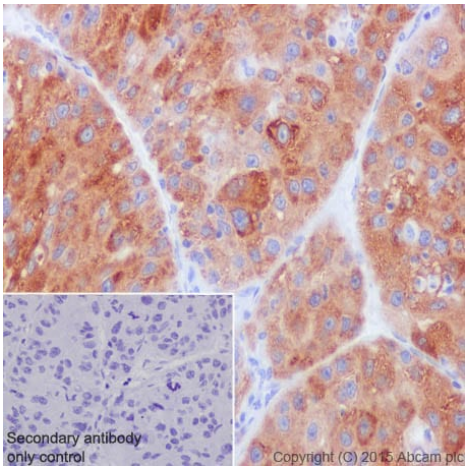
Secondary
All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 79 kDa
Observed band size: 79 kDa

Exposure time: 1 minute

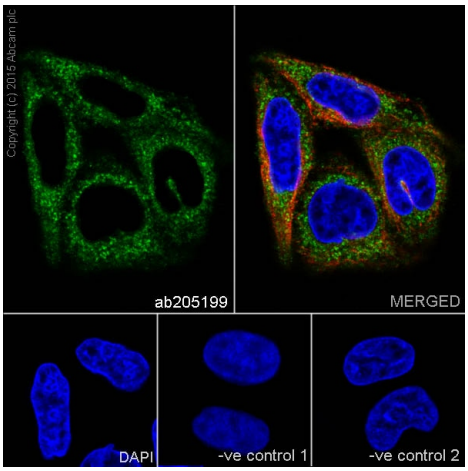
This data was developed using **ab205199**, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.



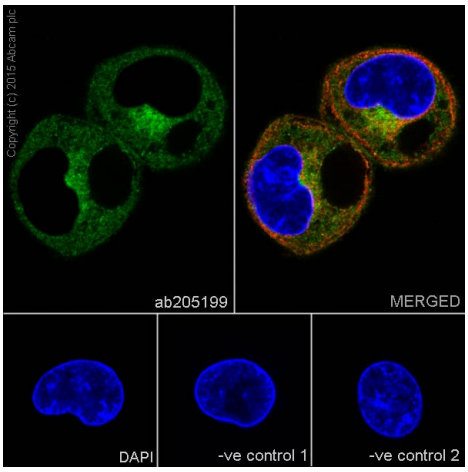
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FACL4 antibody [EPR17587-42] - BSA and Azide free (ab251419)

This data was developed using **ab205199**, the same antibody clone in a different buffer formulation.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.



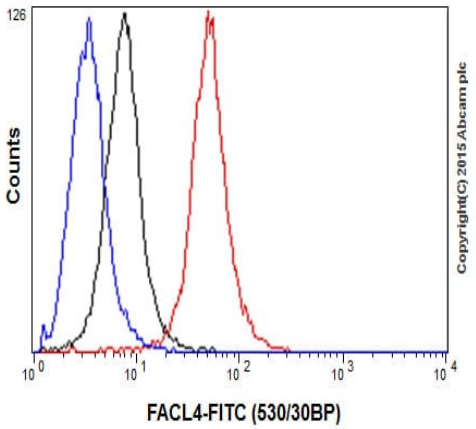
Immunocytochemistry/ Immunofluorescence - Anti-FACL4 antibody [EPR17587-42] - BSA and Azide free (ab251419)

This data was developed using **ab205199**, the same antibody clone in a different buffer formulation.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] - BSA and Azide free (ab251419)

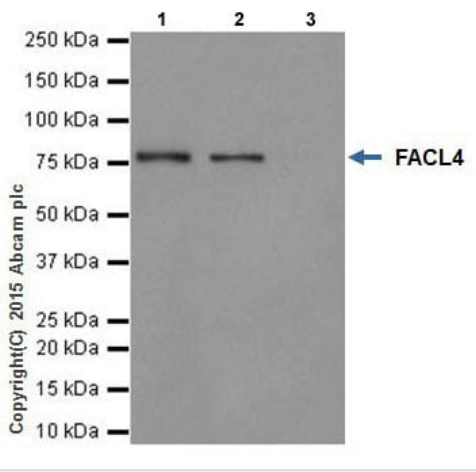
This data was developed using **ab205199**, the same antibody clone in a different buffer formulation.Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized HepG2 (Human liver hepatocellular carcinoma) cells labeling FACL4 with **ab205199** at 1/50 dilution, followed 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] - BSA and Azide free (ab251419)

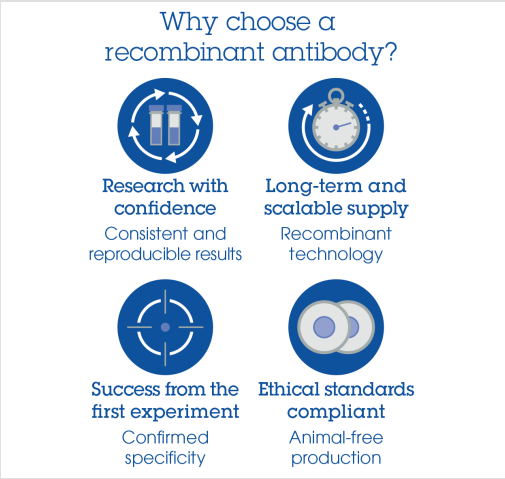
This data was developed using **ab205199**, the same antibody clone in a different buffer formulation.

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] - BSA and Azide free (ab251419)

This data was developed using **ab205199**, the same antibody clone in a different buffer formulation.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% NFDM/TBST.Exposure time: 8 seconds



Anti-FACL4 antibody [EPR17587-42] - BSA and Azide free (ab251419)

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