abcam

Product datasheet

Anti-FACL4 antibody [EPR8640] ab155282

Recombinant RabMAb

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Overview

Product name	Anti-FACL4 antibody [EPR8640]
Description	Rabbit monoclonal [EPR8640] to FACL4
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), IHC-P, IP, WB, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide within Human FACL4. The exact sequence is proprietary.
Positive control	WB: HepG2, HeLa and 293T cell lysates and human fetal kidney tissue, mouse brain tissue, rat brain, kidney and spleen tissue lysates. IHC-P: human hepatocellular carcinoma tissue. ICC/IF: HeLa cells. Flow Cyt (intra): Permeabilized 293T cells. IP: HepG2 whole cell lysate (**ab7900**).
General notes	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 short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	Preservative: 0.01% Sodium azide Constituents: 40% Glycerol, 0.05% BSA, 59% PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR8640
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab155282 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)		1/10 - 1/100. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See **IHC antigen retrieval protocols**.
IP		1/10 - 1/100.
WB	★★★★☆ **(1)**	1/10000 - 1/50000. Predicted molecular weight: 79 kDa.
ICC/IF		1/100 - 1/250.

Target

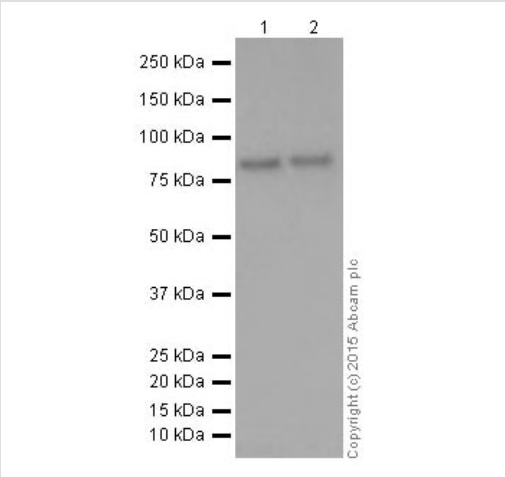
Function Activation of long-chain fatty acids for both synthesis of cellular lipids, and degradation via beta-oxidation. Preferentially uses arachidonate and eicosapentaenoate as substrates.

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 [EPR8640] (ab155282)

All lanes : Anti-FACL4 antibody [EPR8640] (ab155282) at 1/10000 dilution (purified)

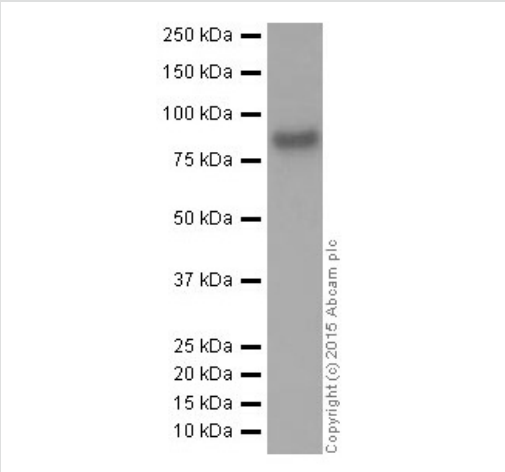
Lane 1 : Mouse brain tissue lysate
Lane 2 : Rat brain tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

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

Blocking and dilution buffer: 5% NFDM/TBST.



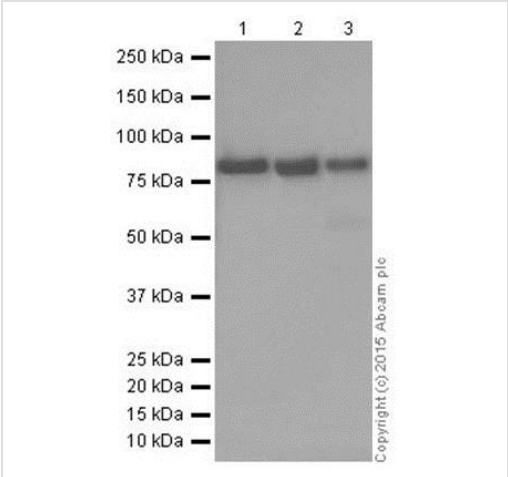
Western blot - Anti-FACL4 antibody [EPR8640] (ab155282)

Anti-FACL4 antibody [EPR8640] (ab155282) at 1/50000 dilution (purified) + HepG2 whole cell lysate at 20 µg

Secondary
Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

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

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-FACL4 antibody [EPR8640] (ab155282)

All lanes : Anti-FACL4 antibody [EPR8640] (ab155282) at 1/10000 dilution (purified)

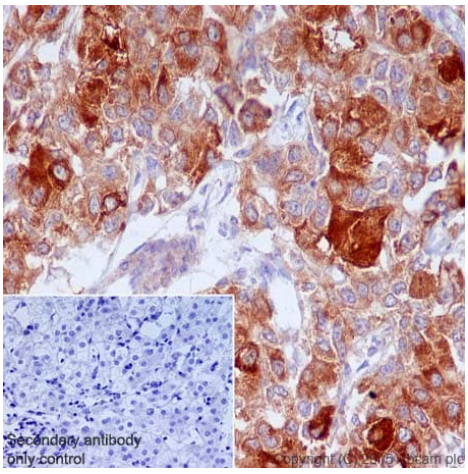
Lane 1 : HeLa whole cell lysate
Lane 2 : HEK293 whole cell lysate
Lane 3 : Human fetal kidney tissue lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Peroxidase-conjugate goat anti-rabbit IgG (H+L) at 1/1000 dilution

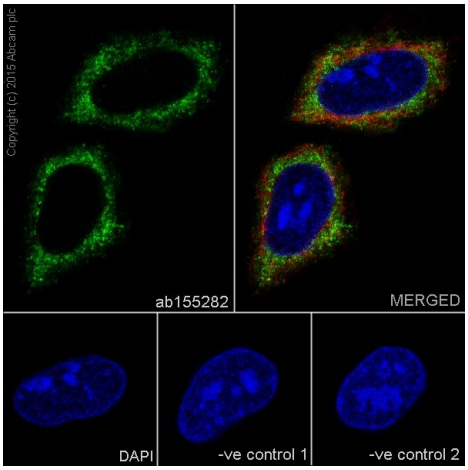
Predicted band size: 79 kDa
Observed band size: 79 kDa

Blocking and dilution buffer: 5% NFDM/TBST.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-FACL4 antibody [EPR8640] (ab155282)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human hepatocellular carcinoma tissue labelling FACL4 with purified ab155282 at 1/200. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. **ab97051**, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.

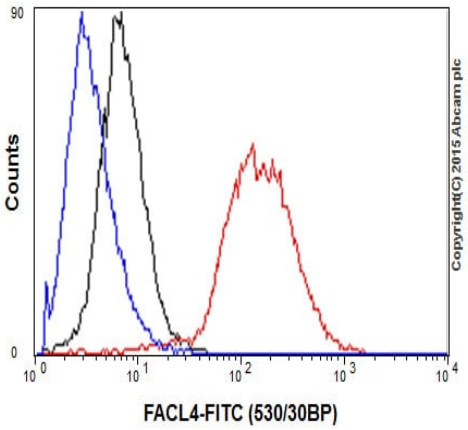


Immunocytochemistry/ Immunofluorescence - Anti-FACL4 antibody [EPR8640] (ab155282)

Immunocytochemistry/Immunofluorescence analysis of HeLa cells labelling FACL4 with purified ab155282 at 1/200. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. **ab7291**, a mouse anti-tubulin (1/1000) and **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) were also used.

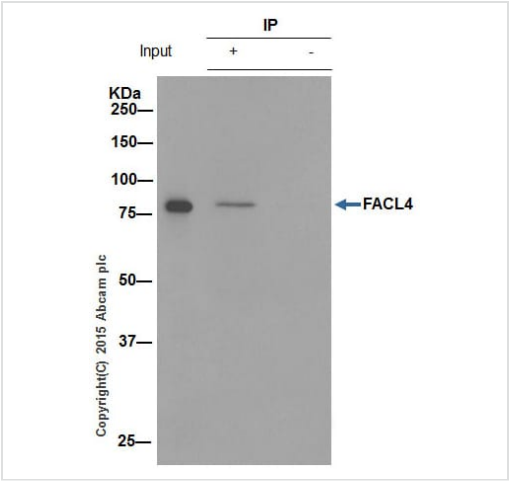
Control 1: primary antibody (1/200) and secondary antibody, **ab150120**, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000).

Control 2: **ab7291** (1/1000) and secondary antibody, **ab150077**, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000).



Flow Cytometry (Intracellular) - Anti-FACL4 antibody [EPR8640] (ab155282)

Intracellular Flow Cytometry analysis of 293T cells labelling FACL4 with purified ab155282 at 1/100 (red). Cells were fixed with 2% paraformaldehyde. A FITC-conjugated goat anti-rabbit IgG (1/500) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.



Immunoprecipitation - Anti-FACL4 antibody [EPR8640] (ab155282)

ab155282 (purified) at 1/30 immunoprecipitating FACL4 in HepG2 whole cell lysate.

Lane 1 (input): HepG2 whole cell lysate (10µg)

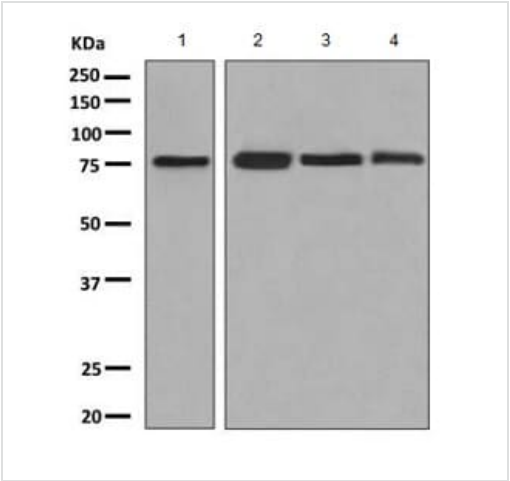
Lane 2 (+): ab155282 + HepG2 whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (**ab172730**) instead of ab155282 in HepG2 whole cell lysate.

For western blotting, a HRP-conjugated anti-rabbit IgG, specific to the non-reduced form of IgG was used as the secondary antibody (1/1500).

Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.



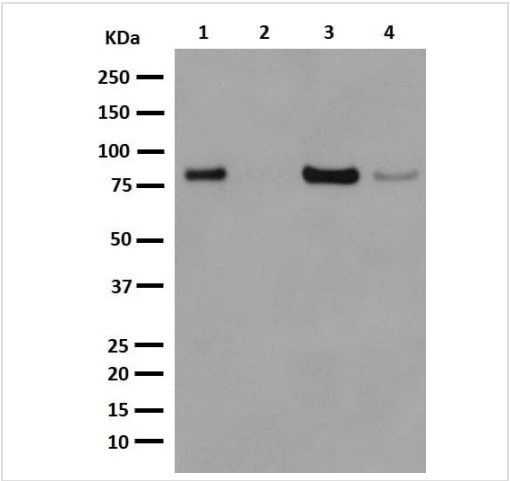
Western blot - Anti-FACL4 antibody [EPR8640] (ab155282)

All lanes : Anti-FACL4 antibody [EPR8640] (ab155282) at 1/10000 dilution (unpurified)

Lane 1 : HepG2 lysate
Lane 2 : HeLa lysate
Lane 3 : 293T lysate
Lane 4 : Fetal kidney lysate, human

Lysates/proteins at 10 µg per lane.

Predicted band size: 79 kDa



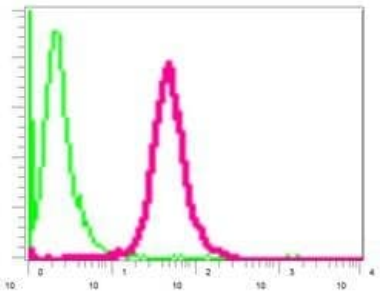
Western blot - Anti-FACL4 antibody [EPR8640] (ab155282)

All lanes : Anti-FACL4 antibody [EPR8640] (ab155282) at 1/10000 dilution (unpurified)

Lane 1 : Rat brain tissue lysate
Lane 2 : Rat heart tissue lysate
Lane 3 : Rat kidney tissue lysate
Lane 4 : Rat spleen tissue lysate

Predicted band size: 79 kDa
Observed band size: 75 kDa

Exposure time: 1 minute



Intracellular flow cytometric analysis of permeabilized 293T cells labelling FACL4with unpurified ab155282 at a dilution of 1/10 (red) compared to a rabbit IgG (negative) (green).

Flow Cytometry (Intracellular) - Anti-FACL4 antibody [EPR8640] (ab155282)

Anti-FACL4 antibody [EPR8640] (ab155282)

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