

Product datasheet

Anti-ACADVL/VLCAD antibody [EPR15107(B)] ab188872

KO VALIDATED Recombinant RabMAB

★★★★★ [1 Abreviews](#) [8 Images](#)

Overview

Product name	Anti-ACADVL/VLCAD antibody [EPR15107(B)]
Description	Rabbit monoclonal [EPR15107(B)] to ACADVL/VLCAD
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), IP, WB, IHC-P
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa, HepG2, A431 and 293 cell lysates. IHC-P: Human kidney tissue and colon adenocarcinoma tissue. WB: HeLa cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p>

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: 40% Glycerol (glycerin, glycerine), 59% PBS, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR15107(B)
Isotype	IgG

Applications

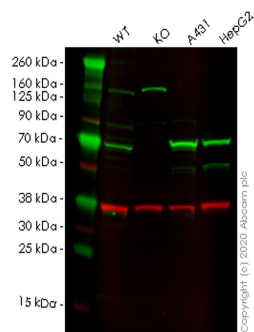
The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab188872 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/160. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
IP		1/40.
WB		1/1000 - 1/10000. Detects a band of approximately 66 kDa (predicted molecular weight: 70 kDa).
IHC-P		1/250 - 1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Target

Function	Active toward esters of long-chain and very long chain fatty acids such as palmitoyl-CoA, mysritoyl-CoA and stearoyl-CoA. Can accomodate substrate acyl chain lengths as long as 24 carbons, but shows little activity for substrates of less than 12 carbons.
Pathway	Lipid metabolism; mitochondrial fatty acid beta-oxidation.
Involvement in disease	Defects in ACADVL are the cause of acyl-CoA dehydrogenase very long chain deficiency (ACADVLD) [MIM:201475]. ACADVLD is an autosomal recessive disease which leads to impaired long-chain fatty acid beta-oxidation. It is clinically heterogeneous, with three major phenotypes: a severe childhood form, with early onset, high mortality, and high incidence of cardiomyopathy; a milder childhood form, with later onset, usually with hypoketotic hypoglycemia as the main presenting feature, low mortality, and rare cardiomyopathy; and an adult form, with isolated skeletal muscle involvement, rhabdomyolysis, and myoglobinuria, usually triggered by exercise or fasting.
Sequence similarities	Belongs to the acyl-CoA dehydrogenase family.
Cellular localization	Mitochondrion inner membrane.

Images



Western blot - Anti-ACADVL/VLCAD antibody [EPR15107(B)] (ab188872)

All lanes : Anti-ACADVL/VLCAD antibody [EPR15107(B)] (ab188872) at 1/1000 dilution

Lane 1 : Wild-type HEK293T cell lysate

Lane 2 : ACADVL knockout HEK293T cell lysate

Lane 3 : A431 cell lysate

Lane 4 : HepG2 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

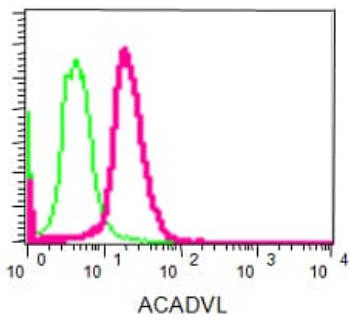
All lanes : Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed ([ab216773](#)) at 1/10000 dilution

Predicted band size: 70 kDa

Observed band size: 70 kDa

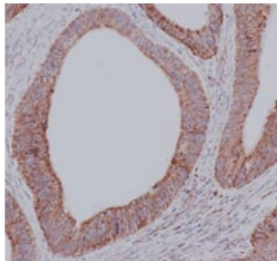
Lanes 1-4: Merged signal (red and green). Green - ab188872 observed at 70 kDa. Red - loading control [ab8245](#) observed at 36 kDa.

ab188872 Anti-ACADVL/VLCAD antibody [EPR15107(B)] was shown to specifically react with ACADVL/VLCAD in wild-type HEK293T cells. Loss of signal was observed when knockout cell line [ab266484](#) (knockout cell lysate [ab257332](#)) was used. Wild-type and ACADVL/VLCAD knockout samples were subjected to SDS-PAGE. ab188872 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.



Flow Cytometry (Intracellular) - Anti-ACADVL/VLCAD antibody [EPR15107(B)] (ab188872)

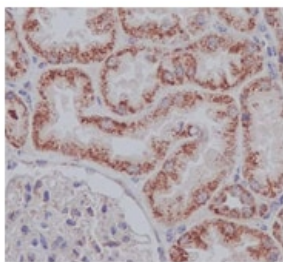
Intracellular flow cytometric analysis of HeLa cells (paraformaldehyde-fixed, 2%) labeling ACADVL/VLCAD with ab188872 at 1/160 dilution (red) or a rabbit IgG (negative) (green), followed by Goat anti rabbit IgG (FITC) secondary at 1/150 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACADVL/VLCAD antibody [EPR15107(B)] (ab188872)

Immunohistochemical analysis of paraffin-embedded Human colon adenocarcinoma tissue labeling ACADVL/VLCAD with ab188872 at 1/500 dilution followed by pre-diluted HRP Polymer for Rabbit IgG secondary antibody and counter-stained with Hematoxylin.

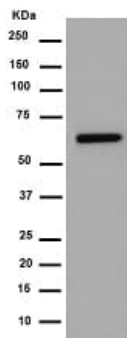
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACADVL/VLCAD antibody [EPR15107(B)] (ab188872)

Immunohistochemical analysis of paraffin-embedded Human kidney tissue labeling ACADVL/VLCAD with ab188872 at 1/500 dilution followed by pre-diluted HRP Polymer for Rabbit IgG secondary antibody and counter-stained with Hematoxylin.

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



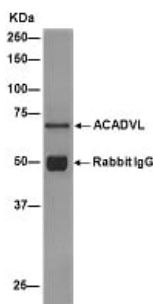
Western blot - Anti-ACADVL/VLCAD antibody [EPR15107(B)] (ab188872)

Anti-ACADVL/VLCAD antibody [EPR15107(B)] (ab188872) at 1/1000 dilution + 293 cell lysate at 20 µg

Secondary

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

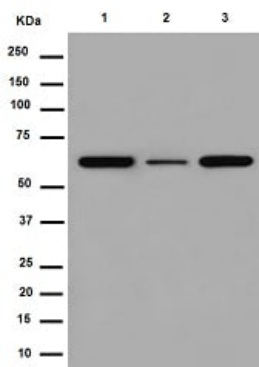
Predicted band size: 70 kDa



Immunoprecipitation - Anti-ACADVL/VLCAD antibody [EPR15107(B)] (ab188872)

Western blot analysis of immunoprecipitation pellet from A431 lysate immunoprecipitated using ab188872 at 1/50 dilution.

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



Western blot - Anti-ACADVL/VLCAD antibody [EPR15107(B)] (ab188872)

All lanes : Anti-ACADVL/VLCAD antibody [EPR15107(B)] (ab188872) at 1/10000 dilution

Lane 1 : HeLa cell lysate

Lane 2 : HepG2 cell lysate

Lane 3 : A431 cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

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

Predicted band size: 70 kDa

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-ACADVL/VLCAD antibody [EPR15107(B)]
(ab188872)

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

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