

Anti-ACADVL/VLCAD antibody [EPR15107(B)] - BSA and Azide free ab231827

KO VALIDATED Recombinant RabMAb

6 Images

Overview

Product name	Anti-ACADVL/VLCAD antibody [EPR15107(B)] - BSA and Azide free
Description	Rabbit monoclonal [EPR15107(B)] to ACADVL/VLCAD - BSA and Azide free
Host species	Rabbit
Tested applications	Suitable for: Flow Cyt (Intra), IHC-P, WB, IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	IHC-P: Human kidney and colon adenocarcinoma tissue. WB: HEK293T, HepG2 and A431 cell lysates. Flow Cyt (intra): HeLa cells.
General notes	<p>ab231827 is the carrier-free version of ab188872.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <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. Do Not Freeze.
Storage buffer	pH: 7.2 Constituent: PBS
Carrier free	Yes
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR15107(B)
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab231827 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)		Use at an assay dependent concentration. ab199376 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
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.
WB		Use at an assay dependent concentration. Detects a band of approximately 66 kDa (predicted molecular weight: 70 kDa).
IP		Use at an assay dependent concentration.

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.

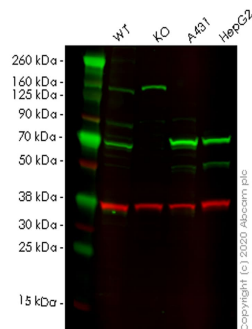
Sequence similarities

Belongs to the acyl-CoA dehydrogenase family.

Cellular localization

Mitochondrion inner membrane.

Images



Western blot - Anti-ACADVL/VLCAD antibody
[EPR15107(B)] - BSA and Azide free (ab231827)

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

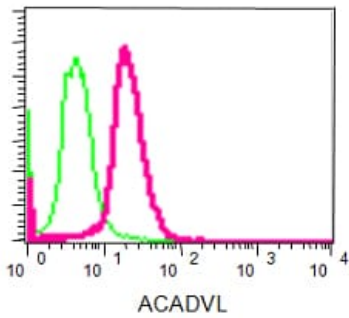
Predicted band size: 70 kDa

Observed band size: 70 kDa

This data was developed using the same antibody clone in a different buffer formulation ([ab188872](#)).

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

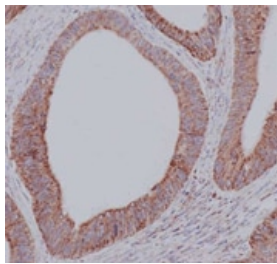
[ab188872](#) Anti-ACADVL/VLCAD antibody [EPR15107(B)] was shown to specifically react with ACADVL/VLCAD in wild-type HEK293T cells. Loss of signal was observed when knockout cell line [ab266484](#) (knockout cell lysate [ab257332](#)) was used. Wild-type and ACADVL/VLCAD knockout samples were subjected 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)] - BSA and Azide free (ab231827)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab188872**).

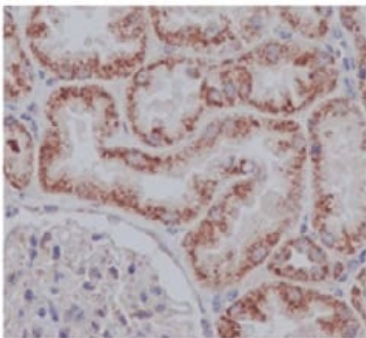


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACADVL/VLCAD antibody [EPR15107(B)] - BSA and Azide free (ab231827)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab188872**).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

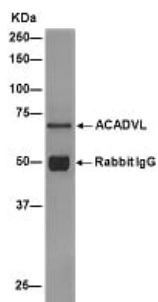


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ACADVL/VLCAD antibody [EPR15107(B)] - BSA and Azide free (ab231827)

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (**ab188872**).

Heat mediated antigen retrieval was performed with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-ACADVL/VLCAD
antibody [EPR15107(B)] - BSA and Azide free
(ab231827)

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.

This data was developed using the same antibody clone in a
different buffer formulation containing PBS, BSA, glycerol, and
sodium azide (**ab188872**).

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

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