

## Very long-chain acyl-CoA dehydrogenase (VLCAD) monoclonal antibody

Cat. no. A21980

**Components:** 100 μg monoclonal antibody

**Lot no.:** See product label

Clone/PAD: 6A9AF2

**Isotype:** Mouse IgG1, κ

Gene ID: 37

Gene Symbol: ACADVL

Alternative Names: Very long-chain specific acyl-CoA dehydrogenase, mitochondrial; ACAD6;

LCACD; VLCAD; ACADVL; 3-hydroxyacyl-CoA dehydrogenase

**Concentration:** 1 mg/mL in Hepes-Buffered Saline (HBS) with 0.02% sodium azide as a

preservative

mAb PURITY: Near homogeneity as judged by SDS-PAGE. The antibody was produced in vitro

using hybridomas grown in serum-free medium, and then purified by

biochemical fractionation.

**Reactivity:** Human, rat, mouse, bovine **Immunogen:** Human liver mitochondria

Validated Applications: Immunocytochemistry, Immunoprecipitation, Immunohistochemistry

Suggested Working 5 µg/mL for Immunocytochemistry

**Concentration:** (This is a starting working concentration. The optimal antibody concentration should be

determined empirically for each specific application.)

**Storage:** Store at 2–8°C. Do not freeze.

**Expiration Date:** See product label.

## **Target Background:**

VLCAD encodes an acyl-Coenzyme A dehydrogenase specific to long-chain and very-long-chain fatty acids. The protein is targeted to the inner mitochondrial membrane where it catalyzes the first step of the mitochondrial fatty acid beta-oxidation pathway. Alternative splicing results in multiple transcript variants encoding different isoforms.

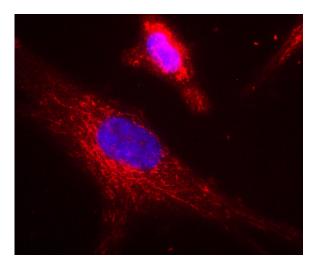


Manufactured exclusively for Invitrogen by MitoSciences, Inc.

For research use only. Not intended for human or animal therapeutic or diagnostic use.

www.invitrogen.com





Immunocytochemistry image of Very long-chain acyl-CoA dehydrogenase (VLCAD) monoclonal antibody. Human HDFn cells were fixed in 4% paraformaldehyde for 20 minutes and then permeabilized with 0.1% Triton<sup>®</sup> X-100 for 15 minutes. The cells were incubated with 5 μg/mL of the antibody overnight at 4°C. Alexa Fluor<sup>®</sup> 594 goat anti-mouse IgG (H+L) was used as a secondary antibody at a 1/1,000 dilution for 1 hour (red). 10% Goat serum was used as the blocking agent for all blocking steps. The cell nuclei were counterstained with DAPI (blue). The target protein locates mainly in mitochondria.



Immunohistochemistry image of Very long-chain acyl-CoA dehydrogenase (VLCAD) monoclonal antibody. Immunohistochemical localization of mitochondrial and metabolic enzymes in sections of normal, aged human cerebellar tissue that was formalin-fixed and paraffin-embedded. Immunolabeling was carried out with primary antibodies diluted in TBST/4% BSA at room temperature for one hour. Immunodetection was carried out using a commercial HRP Detection Kit according the manufacturer's instructions.

The trademarks mentioned herein are the property of Life Technologies Corporation or their respective owners. Triton® is trademark of Union Carbide.

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, <a href="www.invitrogen.com">www.invitrogen.com</a>). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

<sup>©</sup> Copyright 2010, Life Technologies Corporation. All rights reserved. This information is subject to change without notice.