

### **KD-Validated Anti-ACADVL Rabbit Monoclonal Antibody**

Rabbit monoclonal antibody Catalog # AGI1225

### **Specification**

## KD-Validated Anti-ACADVL Rabbit Monoclonal Antibody - Product Information

WB, FC, ICC **Application Primary Accession** P49748 Reactivity Human **Monoclonal** Clonality

Isotype Rabbit IgG Calculated MW

Predicted, 70 kDa, observed, 65 kDa KDa Gene Name **ACADVL** 

Aliases ACADVL; Acyl-CoA Dehydrogenase Very Long Chain; VLCAD; LCACD; ACAD6; Very

> Long-Chain Specific Acyl-CoA Dehydrogenase, Mitochondrial;

Acvi-Coenzyme A Dehydrogenase. Very

Long Chain; EC 1.3.8.9; EC 1.3.99

A synthesized peptide derived from human **Immunogen** 

ACADVL/VLCAD

### KD-Validated Anti-ACADVL Rabbit Monoclonal Antibody - Additional Information

Gene ID 37

**Other Names** 

Very long-chain specific acyl-CoA dehydrogenase, mitochondrial, VLCAD, 1.3.8.9, ACADVL (<a href="http://www.genenames.org/cgi-bin/gene symbol report?hgnc id=92" target=" blank">HGNC:92</a>)

## KD-Validated Anti-ACADVL Rabbit Monoclonal Antibody - Protein Information

Name ACADVL (HGNC:92)

Very long-chain specific acyl-CoA dehydrogenase is one of the acyl-CoA dehydrogenases that catalyze the first step of mitochondrial fatty acid beta-oxidation, an aerobic process breaking down fatty acids into acetyl-CoA and allowing the production of energy from fats (PubMed:<a href="http://www.uniprot.org/citations/18227065" target="\_blank">18227065</a>, PubMed:<a href="http://www.uniprot.org/citations/7668252" target="\_blank">7668252</a>, PubMed:<a href="http://www.uniprot.org/citations/9461620" target="blank">9461620</a>, PubMed:<a href="http://www.uniprot.org/citations/9599005" target="blank">9599005</a>, PubMed:<a href="http://www.uniprot.org/citations/9839948" target="blank">9839948</a>). The first step of fatty acid beta-oxidation consists in the removal of one hydrogen from C-2 and C-3 of the straight-chain fatty acyl-CoA thioester, resulting in the formation of trans-2-enoyl- CoA (PubMed:<a href="http://www.uniprot.org/citations/18227065" target="\_blank">18227065</a>, PubMed:<a href="http://www.uniprot.org/citations/7668252" target="\_blank">7668252</a>, PubMed:<a href="http://www.uniprot.org/citations/9461620" target="\_blank">9461620</a>,



PubMed:<a href="http://www.uniprot.org/citations/9839948" target="\_blank">9839948</a>). Among the different mitochondrial acyl-CoA dehydrogenases, very long- chain specific acyl-CoA dehydrogenase acts specifically on acyl-CoAs with saturated 12 to 24 carbons long primary chains (PubMed:<a href="http://www.uniprot.org/citations/21237683" target="\_blank">21237683</a>, PubMed:<a href="http://www.uniprot.org/citations/9839948" target="\_blank">9839948</a>).

### **Cellular Location**

Mitochondrion inner membrane; Peripheral membrane protein

### **Tissue Location**

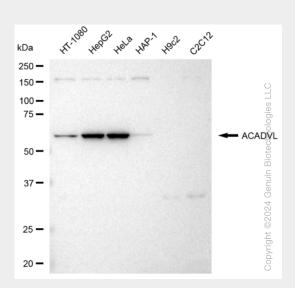
Predominantly expressed in heart and skeletal muscle (at protein level). Also detected in kidney and liver (at protein level).

### KD-Validated Anti-ACADVL Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

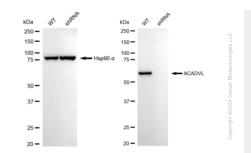
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **KD-Validated Anti-ACADVL Rabbit Monoclonal Antibody - Images**

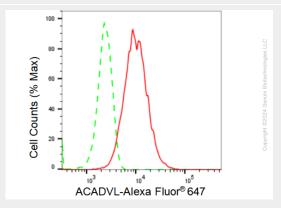


Western blotting analysis using anti-ACADVL antibody (Cat#AGI1225). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-ACADVL antibody (Cat#AGI1225, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

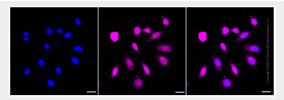




Western blotting analysis using anti-ACADVL antibody (Cat#AGI1225). ACADVL expression in wild type (WT) and ACADVL shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-ACADVL antibody (Cat#AGI1225, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of ACADVL expression in HepG2 cells using ACADVL antibody (Cat#AGI1225, 1:2,000). Green, isotype control; red, ACADVL.



Immunocytochemical staining of HepG2 cells with ACADVL antibody (Cat#AGI1225, 1:1,000). Nuclei were stained blue with DAPI; ACADVL was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.