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 Concentration:	5 µg/mL for Immunocytochemistry (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.

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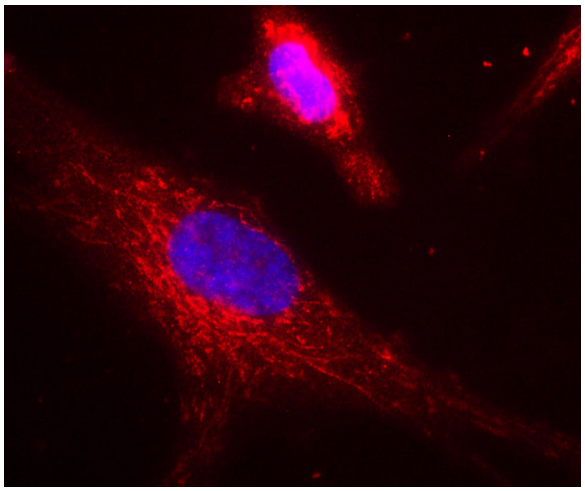
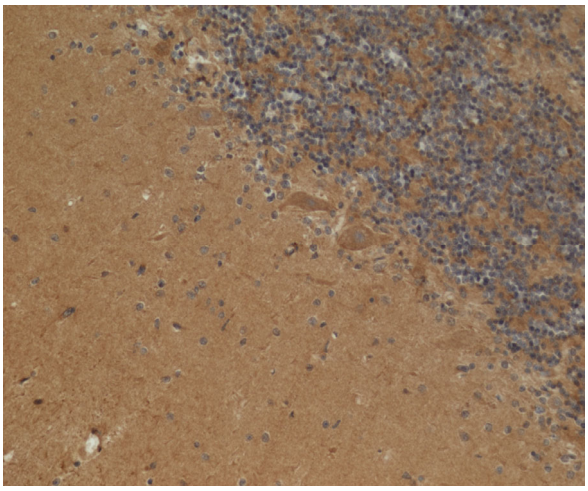


Immunocytochemistry image of Very long-chain acyl-CoA dehydrogenase (VLCAD) monoclonal antibody. Human HDFn cells were fixed in 4% paraformaldehyde for 20 minutes and then permeabilized with 0.1% Triton® X-100 for 15 minutes. The cells were incubated with 5 µg/mL of the antibody overnight at 4°C. Alexa Fluor® 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.