10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ACADVL/VLCAD Antibody

Rabbit mAb
Catalog # AP93241

Product Information

Application	WB, IHC, IP
Primary Accession	P49748
Reactivity	Human
Clonality	Monoclonal
Other Names	ACAD6; Acadvl; LCACD; VLCAD;
Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	70390

Additional Information

Dilution	WB 1:500~1:2000 IHC 1:50~1:200 IP 1:50
Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human ACADVL/VLCAD
Description	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.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

Protein Information

Name	ACADVL (HGNC:92)
Function	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:18227065, PubMed:7668252, PubMed:9461620, PubMed:9599005, PubMed:9839948). 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:18227065, PubMed:7668252, PubMed:9461620, PubMed:9839948). 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:21237683, PubMed:9839948).
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).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.