

## **Product datasheet for TR500008**

## **Acadvl Mouse shRNA Plasmid (Locus ID 11370)**

**Product data:** 

**Product Type:** shRNA Plasmids

**Product Name:** Acadvl Mouse shRNA Plasmid (Locus ID 11370)

**Locus ID:** 11370

Synonyms: VL; vlcad

**Vector:** pRS (TR20003)

E. coli Selection: Ampicillin

Mammalian Cell Puromycin

Selection:

Format: Retroviral plasmids

Components: Acadvl - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID =

11370). 5µg purified plasmid DNA per construct

29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.

RefSeq: <u>BC026559</u>, <u>NM 017366</u>, <u>NM 017366.1</u>, <u>NM 017366.2</u>, <u>NM 017366.3</u>

UniProt ID: P50544

**Summary:** This gene encodes a homodimeric mitochondrial flavoprotein and is a member of the acyl-

CoA dehydrogenase family. Members of this family catalyze the first step of fatty acid beta-

oxidation, forming a C2-C3 trans-double bond in a FAD-dependent reaction. As beta-

oxidation cycles through its four steps, each member of the acyl-CoA dehydrogenase family works at an optimum fatty acid chain-length. This enzyme has its optimum length between C16- and C20-acylCoA and localizes to the inner mitochondrial membrane (unlike related acyl-CoA dehydrogenases). In mice, deficiency of this gene can cause ventricular arrhythmias

as well as fasting and cold intolerance. [provided by RefSeq, Nov 2012]

shRNA Design: These shRNA constructs were designed against multiple splice variants at this gene locus. To

be certain that your variant of interest is targeted, please contact <u>techsupport@origene.com</u>. If you need a special design or shRNA sequence, please utilize our <u>custom shRNA service</u>.



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## Performance Guaranteed:

OriGene guarantees that the sequences in the shRNA expression cassettes are verified to correspond to the target gene with 100% identity. One of the four constructs at minimum are guaranteed to produce 70% or more gene expression knock-down provided a minimum transfection efficiency of 80% is achieved. Western Blot data is recommended over qPCR to evaluate the silencing effect of the shRNA constructs 72 hrs post transfection. To properly assess knockdown, the gene expression level from the included scramble control vector must be used in comparison with the target-specific shRNA transfected samples.

For non-conforming shRNA, requests for replacement product must be made within ninety (90) days from the date of delivery of the shRNA kit. To arrange for a free replacement with newly designed constructs, please contact Technical Services at techsupport@origene.com. Please provide your data indicating the transfection efficiency and measurement of gene expression knockdown compared to the scrambled shRNA control (Western Blot data preferred).