

Product datasheet for **TR511688**

Acot8 Mouse shRNA Plasmid (Locus ID 170789)

Product data:

Product Type:	shRNA Plasmids
Product Name:	Acot8 Mouse shRNA Plasmid (Locus ID 170789)
Locus ID:	170789
Synonyms:	PTE-2; Pte1
Vector:	pRS (TR20003)
E. coli Selection:	Ampicillin
Mammalian Cell Selection:	Puromycin
Format:	Retroviral plasmids
Components:	Acot8 - Mouse, 4 unique 29mer shRNA constructs in retroviral untagged vector(Gene ID = 170789). 5µg purified plasmid DNA per construct 29-mer scrambled shRNA cassette in pRS Vector, TR30012, included for free.
RefSeq:	BC005792 , NM_133240 , NM_133240.1 , NM_133240.2 , BC052526 , NM_001362756 , NM_001362757
UniProt ID:	P58137
Summary:	Acyl-coenzyme A (acyl-CoA) thioesterases are a group of enzymes that catalyze the hydrolysis of acyl-CoAs to the free fatty acid and coenzyme A (CoASH), providing the potential to regulate intracellular levels of acyl-CoAs, free fatty acids and CoASH (PubMed:11673457). Acyl-coenzyme A thioesterase 8/ACOT8 display no strong substrate specificity with respect to the carboxylic acid moiety of Acyl-CoAs (PubMed:11673457). Hydrolyzes medium length (C2 to C20) straight-chain, saturated and unsaturated acyl-CoAs but is inactive towards substrates with longer aliphatic chains (PubMed:11673457). Moreover, it catalyzes the hydrolysis of CoA esters of bile acids, such as choloyl-CoA and chenodeoxycholoyl-CoA and competes with bile acid CoA:amino acid N-acyltransferase (BAAT) (PubMed:11673457). ACOT8 is also able to hydrolyze CoA esters of dicarboxylic acids (PubMed:16141203). It is involved in the metabolic regulation of peroxisome proliferation (By similarity).[UniProtKB/Swiss-Prot Function]
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 techsupport@origene.com . If you need a special design or shRNA sequence, please utilize our custom shRNA service .



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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).