

**KD-Validated Anti-Acyl-CoA dehydrogenase short chain Rabbit Monoclonal Antibody**  
**Rabbit monoclonal antibody**  
**Catalog # AGI2342****Specification****KD-Validated Anti-Acyl-CoA dehydrogenase short chain Rabbit Monoclonal Antibody - Product Information**

Application	WB, ICC
Primary Accession	<a href="#">P16219</a>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 44 kDa ; Observed, 40 kDa
Gene Name	ACADS
Aliases	ACADS; Acyl-CoA Dehydrogenase Short Chain; SCAD; ACAD3; Short-Chain Specific Acyl-CoA Dehydrogenase, Mitochondrial; Acyl-Coenzyme A Dehydrogenase, C-2 To C-3 Short Chain; Butyryl-CoA Dehydrogenase; Mitochondrial Short-Chain Specific Acyl-CoA Dehydrogenase; Acyl-CoA Dehydrogenase, C-2 To C-3 Short Chain; Epididymis Secretory Sperm Binding Protein; Unsaturated Acyl-CoA Reductase; EC 1.3.99.2; EC 1.3.8.1; EC 1.3.99
Immunogen	A synthesized peptide derived from human ACADS / SCAD

**KD-Validated Anti-Acyl-CoA dehydrogenase short chain Rabbit Monoclonal Antibody - Additional Information**

Gene ID	35
<b>Other Names</b>	
Short-chain specific acyl-CoA dehydrogenase, mitochondrial, SCAD, 1.3.8.1, Butyryl-CoA dehydrogenase, ACADS	

**KD-Validated Anti-Acyl-CoA dehydrogenase short chain Rabbit Monoclonal Antibody - Protein Information****Name** ACADS**Function**

Short-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 (By similarity). 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 (By

similarity). Among the different mitochondrial acyl-CoA dehydrogenases, short-chain specific acyl-CoA dehydrogenase acts specifically on acyl-CoAs with saturated 4 to 6 carbons long primary chains (PubMed:<a href="http://www.uniprot.org/citations/11134486" target="\_blank">11134486</a>, PubMed:<a href="http://www.uniprot.org/citations/21237683" target="\_blank">21237683</a>).

### Cellular Location

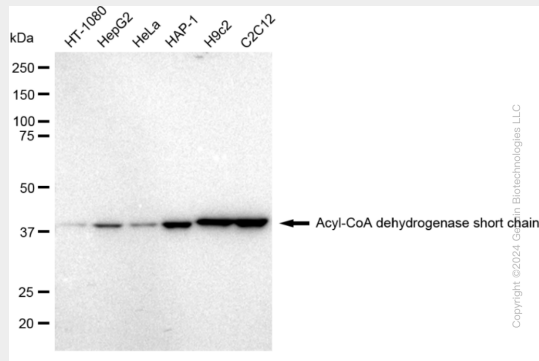
Mitochondrion matrix {ECO:0000250|UniProtKB:Q3ZBF6}

## KD-Validated Anti-Acyl-CoA dehydrogenase short chain Rabbit Monoclonal Antibody - Protocols

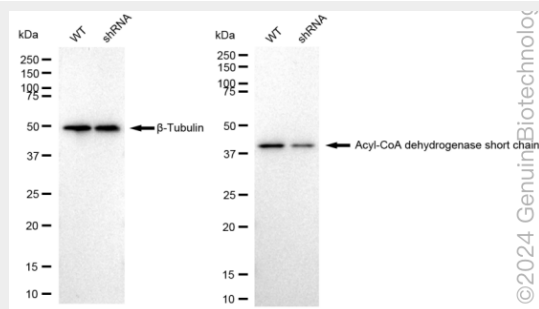
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## KD-Validated Anti-Acyl-CoA dehydrogenase short chain Rabbit Monoclonal Antibody - Images

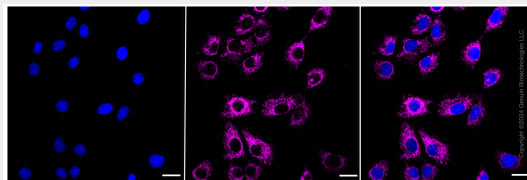


Western blotting analysis using anti-Acyl-CoA dehydrogenase short chain antibody (Cat#AGI2342). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Acyl-CoA dehydrogenase short chain antibody (Cat#AGI2342, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Acyl-CoA dehydrogenase short chain antibody

(Cat#AGI2342). Acyl-CoA dehydrogenase short chain expression in wild type (WT) and acyl-CoA dehydrogenase short chain shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates.  $\beta$ -Tubulin serves as a loading control. The blot was incubated with anti-Acyl-CoA dehydrogenase short chain antibody (Cat#AGI2342, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Immunocytochemical staining of HeLa cells with Acyl-CoA dehydrogenase short chain antibody (Cat#AGI2342, 1:1,000). Nuclei were stained blue with DAPI; Acyl-CoA dehydrogenase short chain 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  $\mu$ m.