

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 Primary Accession Reactivity Clonality Isotype Calculated MW	WB, ICC <u>P16219</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 4 4 kDa ; Observed, 4 0 kDa KDa
Gene Name Aliases	ACADS 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 Other Names 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:11134486, PubMed:21237683).

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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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



Western blotting analysis using anti-Acyl-CoA dehydrogenase short chain antibody (Cat#69112). 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#69112, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ[™] ECL Substrate Kit (Cat#226).





Western blotting analysis using anti-Acyl-CoA dehydrogenase short chain antibody (Cat#69112). Acyl-CoA dehydrogenase short chain expression in wild type (WT) and acyl-CoA dehydrogenase short chain shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-Acyl-CoA dehydrogenase short chain antibody (Cat#69112, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (Cat#201, 1:20,000) respectively. Image was developed using FeQ[™] ECL Substrate Kit (Cat#226).



Immunocytochemical staining of HeLa cells with Acyl-CoA dehydrogenase short chain antibody (Cat#69112, 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 µm.