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# Anti-SCD Antibody

Catalog # AP53832

## Product Information

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|---|---|
| **Application** | WB, IF/IC |
| **Primary Accession** | O00767 |
| **Reactivity** | Human, Rat, Pig |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Calculated MW** | 41523 |

## Additional Information

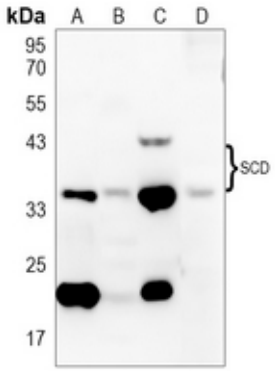
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|---|---|
| **Gene ID** | 6319 |
| **Other Names** | Acyl-CoA desaturase; Delta(9)-desaturase; Delta-9 desaturase; Fatty acid desaturase; Stearoyl-CoA desaturase |
| **Target/Specificity** | KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human SCD. The exact sequence is proprietary. |
| **Dilution** | WB~~1/500 - 1/1000 IF/IC~~N/A |
| **Format** | Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide. |
| **Storage** | Store at -20 °C.Stable for 12 months from date of receipt |

## Protein Information

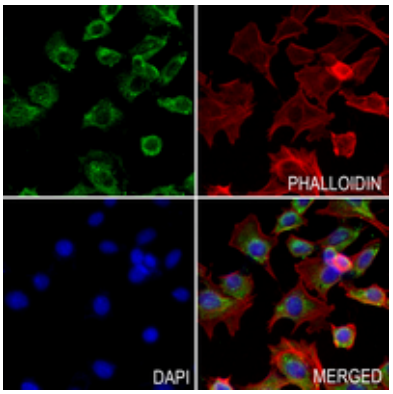
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|---|---|
| **Name** | SCD |
| **Function** | Stearoyl-CoA desaturase that utilizes O(2) and electrons from reduced cytochrome b5 to introduce the first double bond into saturated fatty acyl-CoA substrates (PubMed:15907797, PubMed:18765284). Catalyzes the insertion of a cis double bond at the delta-9 position into fatty acyl-CoA substrates including palmitoyl-CoA and stearoyl-CoA (PubMed:15907797, PubMed:18765284). Gives rise to a mixture of 16:1 and 18:1 unsaturated fatty acids (PubMed:15610069). Plays an important role in lipid biosynthesis. Plays an important role in regulating the expression of genes that are involved in lipogenesis and in regulating mitochondrial fatty acid oxidation (By similarity). Plays an important role in body energy homeostasis (By similarity). Contributes to the biosynthesis of membrane phospholipids, cholesterol esters and triglycerides (By similarity). |
| **Cellular Location** | Endoplasmic reticulum membrane; Multi-pass membrane protein {ECO:0000269\|PubMed:18765284, ECO:0000305} |

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| **Tissue Location** | Detected in fetal liver, lung and brain. Highly expressed in adult adipose tissue, and at lower levels in adult brain and lung. |

## Images




Western blot analysis of SCD expression in Jurkat (A), rat kidney (B), rat liver (C), rat muscle (D) whole cell lysates. (Predicted band size: 41 kD; Observed band size: 41, 35 kD)




Immunofluorescent analysis of SCD staining in MOVAS cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

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