

**SCD Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10673****Specification**

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**SCD Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q6P7B9</a>
Other Accession	<a href="#">NP_114029</a>
Reactivity	Human, Mouse, Rat, Hamster, Pig
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	41013

**SCD Antibody - Additional Information****Gene ID** 83792**Application & Usage**

Western blotting (0.5-4 µg/ml). However, the optimal conditions should be determined individually. Other applications have not been determined. The antibody recognizes a ~37 kDa SCD. Rat kidney tissue lysate can be used as a positive control.

**Other Names**  
stearoyl-CoA desaturase**Target/Specificity**  
SCD**Antibody Form**  
Liquid**Appearance**  
Colorless liquid**Formulation**  
100 µg (0.5 mg/ml) affinity purified rabbit anti-SCD polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5% BSA, 0.01% thimerosal.**Handling**  
The antibody solution should be gently mixed before use.**Reconstitution & Storage**  
-20 °C**Background Descriptions**

**Precautions**

SCD Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**SCD Antibody - Protein Information****Name** Scd2**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. 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:<a href="http://www.uniprot.org/citations/20228221" target="\_blank">20228221</a>). Gives rise to a mixture of 16:1 and 18:1 unsaturated fatty acids (PubMed:<a href="http://www.uniprot.org/citations/20228221" target="\_blank">20228221</a>). Contributes to the biosynthesis of membrane phospholipids, cholesterol esters and triglycerides, especially during embryonic development and in neonates. Important for normal permeability barrier function of the skin in neonates.

**Cellular Location**

Endoplasmic reticulum membrane {ECO:0000250|UniProtKB:P13011}; Multi-pass membrane protein {ECO:0000250|UniProtKB:P13011}. Microsome membrane {ECO:0000250|UniProtKB:P13011}

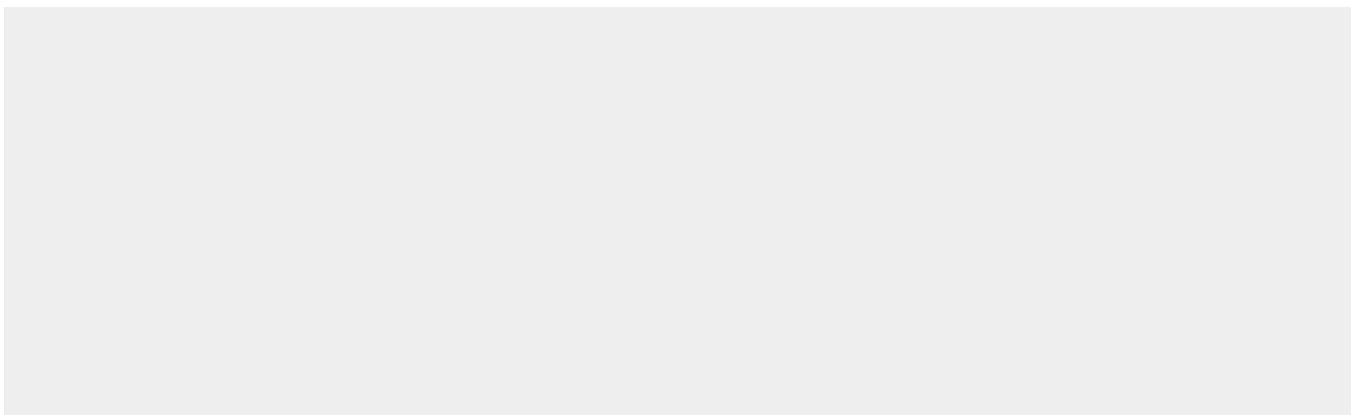
**Tissue Location**

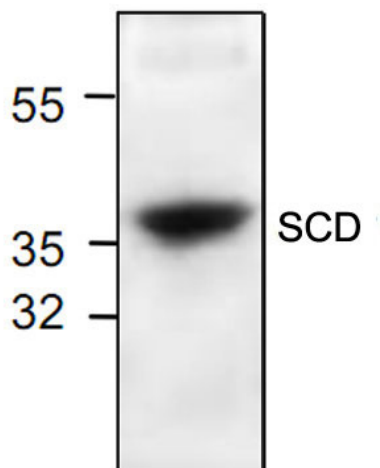
Detected in brain and adipose tissue, and at much lower levels in testis. Detected in liver when rats are kept on a fat- free diet, but not when their food contains unsaturated fatty acids

**SCD 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](#)

**SCD Antibody - Images**



Western blot analysis of SCD with rat kidney tissue lysate.

### SCD Antibody - Background

Stearoyl-CoA desaturase (SCD) is a regulatory enzyme involved in the synthesis of oleate and palmitoleate. Oleate and palmitoleate are the main components of membrane phospholipid, triglycerides and cholesterol esters. SCD plays an important role in cellular cholesterol homeostasis and also in the secretion processes of triacylglycerol and phospholipid. Inhibition of SCD could be a useful treatment for metabolic disorders such as obesity and hepatic steatosis.