

# Stearoyl-CoA desaturase Antibody (C-Term)

Peptide-affinity purified goat antibody Catalog # AF2496a

## **Specification**

## Stearoyl-CoA desaturase Antibody (C-Term) - Product Information

Application IHC, FC, E
Primary Accession O00767

Other Accession NP 005054.3, 6319

Reactivity
Host
Clonality
Concentration
Conc

Isotype IgG
Calculated MW 41523

## Stearoyl-CoA desaturase Antibody (C-Term) - Additional Information

### **Gene ID 6319**

### **Other Names**

Acyl-CoA desaturase, 1.14.19.1, Delta(9)-desaturase, Delta-9 desaturase, Fatty acid desaturase, Stearoyl-CoA desaturase, SCD

### **Dilution**

IHC~~1:100~500 FC~~1:10~50 E~~N/A

### **Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

## Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Stearoyl-CoA desaturase Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

## Stearoyl-CoA desaturase Antibody (C-Term) - Protein Information

### 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:<a



href="http://www.uniprot.org/citations/15907797" target="\_blank">15907797</a>, PubMed:<a href="http://www.uniprot.org/citations/18765284" target="\_blank">18765284</a>). 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/15907797" target="\_blank">15907797</a>, PubMed:<a href="http://www.uniprot.org/citations/18765284" target="\_blank">18765284</a>). Gives rise to a mixture of 16:1 and 18:1 unsaturated fatty acids (PubMed:<a href="http://www.uniprot.org/citations/15610069" target="\_blank">15610069</a>). 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}

#### **Tissue Location**

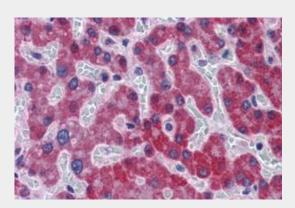
Detected in fetal liver, lung and brain. Highly expressed in adult adipose tissue, and at lower levels in adult brain and lung.

### Stearoyl-CoA desaturase Antibody (C-Term) - Protocols

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

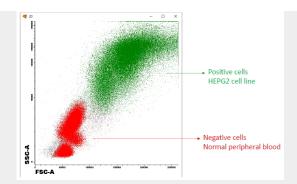
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cvtometv
- Cell Culture

## Stearoyl-CoA desaturase Antibody (C-Term) - Images



AF2496a (5  $\mu$ g/ml) staining of paraffin embedded Human Liver. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.





Antibody (2.5ul) staining of HepG2 cells mixed in with PBL. Detected by fluorescence with PE for SCD in green and with OC515 for CD45 (CYT-450C) in red.

# Stearoyl-CoA desaturase Antibody (C-Term) - References

Characterization of human SCD2, an oligomeric desaturase with improved stability and enzyme activity by cross-linking in intact cells. Zhang S, Yang Y, Shi Y. Biochem J. 2004 Dec 20; [Epub ahead of print] PMID: 15610069