

SCD Recombinant Rabbit mAb

Catalog # AP97142

Product Information

Application	WB, IHC-P, IHC-F, IF, E
Primary Accession	O00767
Other Accession	O00767
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Recombinant
Calculated MW	41523
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SCD
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the fatty acid desaturase family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	This gene encodes an enzyme involved in fatty acid biosynthesis, primarily the synthesis of oleic acid. The protein belongs to the fatty acid desaturase family and is an integral membrane protein located in the endoplasmic reticulum. Transcripts of approximately 3.9 and 5.2 kb, differing only by alternative polyadenylation signals, have been detected. A gene encoding a similar enzyme is located on chromosome 4 and a pseudogene of this gene is located on chromosome 17. [provided by RefSeq, Sep 2015]

Additional Information

Gene ID	6319
Other Names	FADS5; MSTP008; SCD1; SCDOS; hSCD1; Scd; Scd-1; ab; SCD_HUMAN; Acyl-CoA desaturase; Delta(9)-desaturase (Delta-9 desaturase); Fatty acid desaturase; 1.14.19.1; ACOD1_MOUSE; Delta(9)-desaturase 1 (Delta-9 desaturase 1); Fatty acid desaturase 1; Stearoyl-CoA desaturase 1; ACOD1_RAT; stearoyl-CoA desaturase; stearoyl-CoA desaturase opposite strand; stearoyl-CoA desaturase (delta-9-desaturase); delta-9-desaturase
Dilution	WB=1:500-2000,IHC-P=1:50-200,IF=1:50-200,ELISA=1:5000-10000,IHC-F=1:50-200
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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