



Rabbit Anti-SCD1 antibody

SL3787R

Product Name:	SCD1
Chinese Name:	固醇酰辅酶A脱氢酶1抗体
Alias:	ACOD_HUMAN; Acyl-CoA desaturase; Delta(9)-desaturase; Delta-9 desaturase; Delta-9-Desaturase; FADS5; Fatty acid desaturase; PRO0998; SCD 1; SCD; SCD1; Stearoyl-CoA Desaturase.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Rabbit,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	41kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human SCD1:265-359/359
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	Stearoyl-CoA desaturase (SCD) is a regulatory enzyme in lipogenesis. The SCD1 gene is tightly regulated by signals such as insulin, leptin, carbohydrate, fatty acids and temperature. The enzyme is constitutively expressed in adipose tissue and is induced in liver in response to a fat free, high carbohydrate diet. SCD1 expression is higher in female than male mouse. The repression of RNA levels and enzyme activity of hepatic

SCD1 by Leptin has been shown to significantly reduce the triglyceride storage, VLDL production and therefore an increase in fatty acid oxidation. Inhibition of SCD1 could be of benefit for treatment of obesity, hepatic steatosis and other metabolic disorders.

Function:

Terminal component of the liver microsomal stearyl-CoA desaturase system, that utilizes O₂ and electrons from reduced cytochrome b₅ to catalyze the insertion of a double bond into a spectrum of fatty acyl-CoA substrates including palmitoyl-CoA and stearyl-CoA.

Subcellular Location:

Endoplasmic reticulum membrane; Multi-pass membrane protein (Probable).

Similarity:

Belongs to the fatty acid desaturase family.

SWISS:

O00767

Gene ID:

6319

Database links:

[Entrez Gene: 6319](#)Human

[Entrez Gene: 20249](#)Mouse

[Entrez Gene: 83792](#)Rat

[Omim: 604031](#)Human

[SwissProt: O00767](#)Human

[SwissProt: P13516](#)Mouse

[SwissProt: P07308](#)Rat

[Unigene: 558396](#)Human

[Unigene: 597496](#)Human

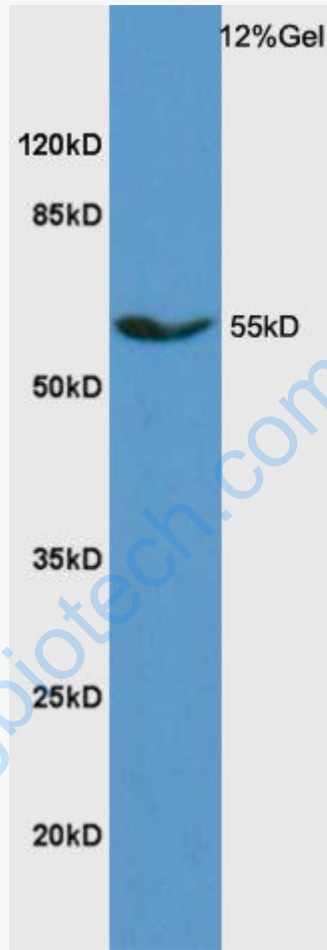
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

固醇酰辅酶A脱氢酶1(SCD1)是催化细胞中饱和脂肪酸(SFA)转化为单不饱和脂肪酸(MUFA)的限速酶, 在调控脂肪酸代谢、维持能量平衡、调节胰岛素敏感性及衰老

等方面都发挥着重要作用, 近来在肥胖、激素调节、对瘦素的作用等研究受到了重视。

Picture:



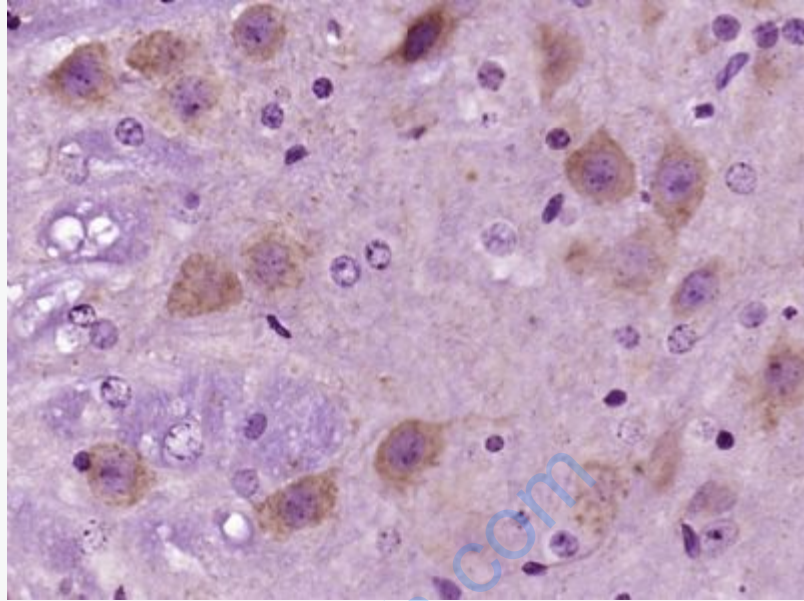
Sample:Lung (Rat) Lysate at 40 ug

Primary: Anti- SCD1 (SL3787R) at 1/300 dilution

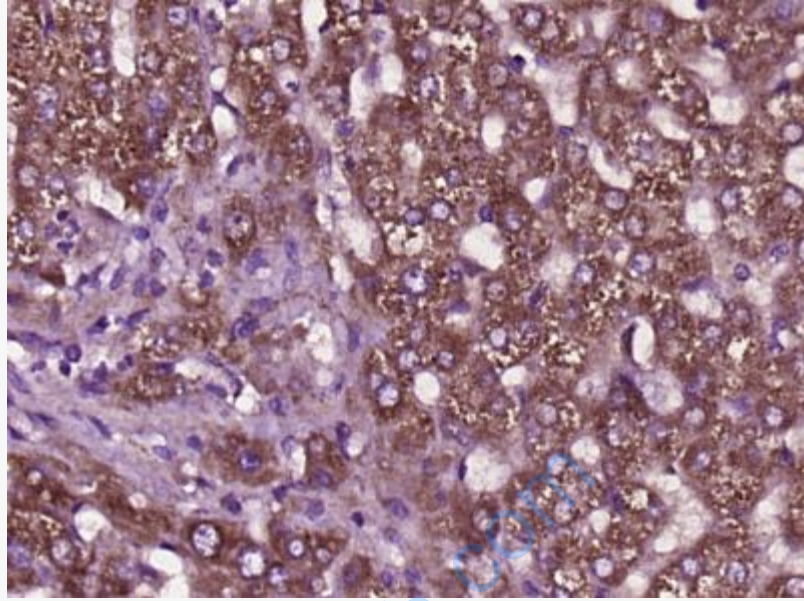
Secondary: HRP conjugated Goat-Anti-rabbit IgG (SL3787R) at 1/5000 dilution

Predicted band size: 41 kD

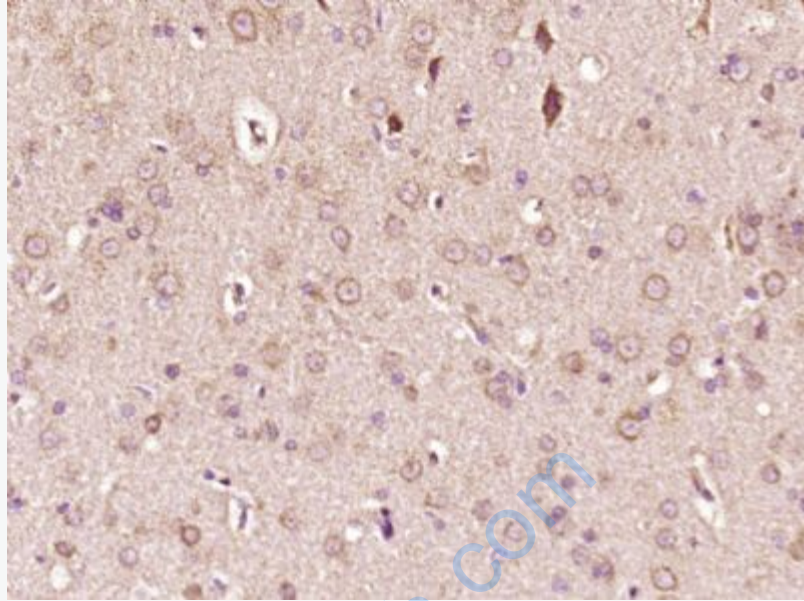
Observed band size: 55 kD



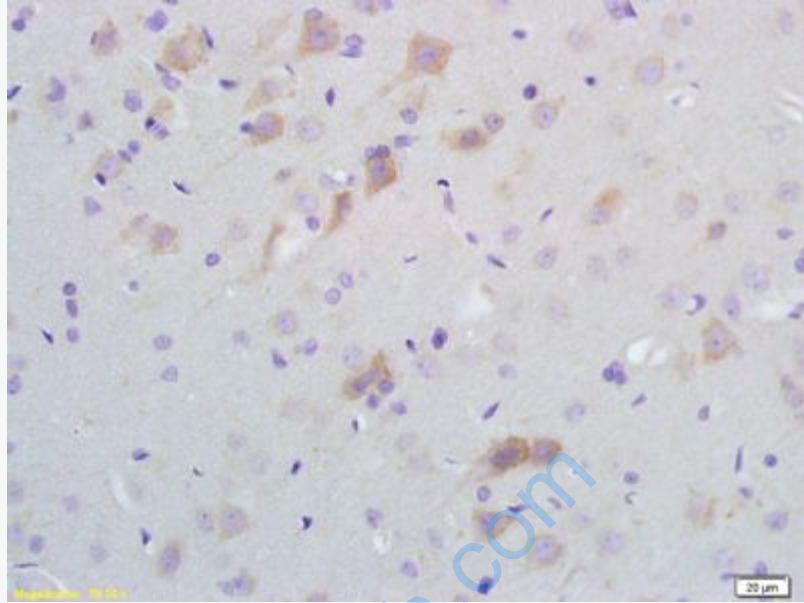
Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SCD1) Polyclonal Antibody, Unconjugated (SL3787R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human liver cancer); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SCD1) Polyclonal Antibody, Unconjugated (SL3787R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SCD1) Polyclonal Antibody, Unconjugated (SL3787R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;
Incubation: Anti-SCD1 Polyclonal Antibody, Unconjugated(SL3787R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining