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SCD1 Rabbit mAb

Catalog # AP76059

Product Information

Application	WB, IHC-P, IHC-F, FC, IP
Primary Accession	O00767
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Purification	Affinity Purified
Calculated MW	41523

Additional Information

Gene ID	6319
Other Names	SCD
Dilution	WB~~1:500-1:2000 IHC-P~~N/A IHC-F~~N/A FC~~1:200-1:500 IP~~1:20-1:50
Format	1xPBS(pH 7.4), 150mM NaCl, 50% Glycerol, 0.02% Sodium azide and 0.05% BSA
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

Protein Information

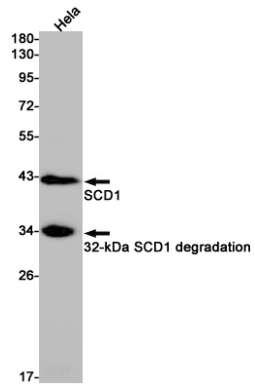
Name	SCD
Function	Stearoyl-CoA desaturase that utilizes O(2) and electrons from reduced cytochrome b5 to introduce the first double bond into saturated fatty acyl-CoA substrates (PubMed:15907797, PubMed:18765284). Catalyzes the insertion of a cis double bond at the delta-9 position into fatty acyl-CoA 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.

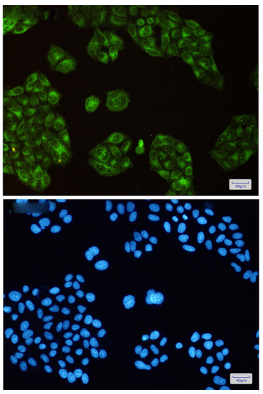
Background

Stearyl-CoA desaturase that utilizes O2 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 . Plays an important role in body energy homeostasis . Contributes to the biosynthesis of membrane phospholipids, cholesterol esters and triglycerides .

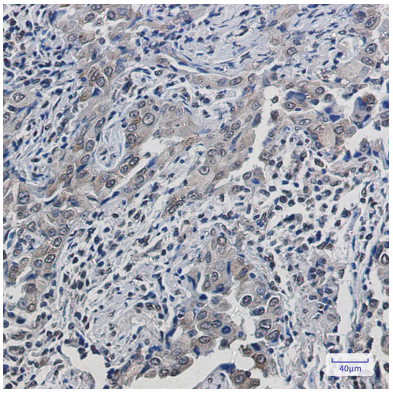
Images



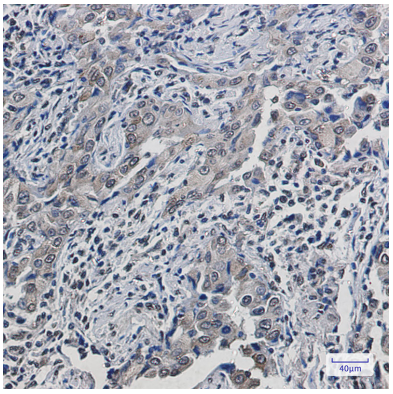
Western blot analysis of SCD1 in Hela lysates using SCD1 antibody.

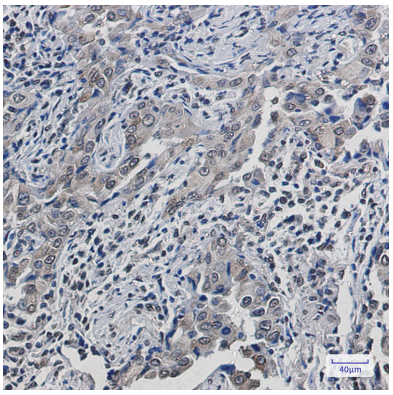


Immunocytochemistry analysis of SCD1(green) in Hela using SCD1 antibody,and DAPI(blue)



Immunohistochemistry analysis of paraffin-embedded Human lung cancer using SCD1 antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.





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