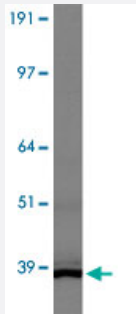


SCD polyclonal antibody

Catalog # PAB15510 Size 100 uL

Applications



Western Blot (Tissue lysate)

Western blot of normal human liver lysate with SCD polyclonal antibody (Cat # PAB15510).

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of SCD.
Immunogen	A synthetic peptide corresponding to amino acids 50-100 of human SCD.
Host	Rabbit
Reactivity	Human
Specificity	This antibody is useful for Western blot analysis where a band can be seen at ~41 KDa.
Form	Liquid
Recommend Usage	Immunocytochemistry (1:50) Immunofluorescence (1:50) Western Blot (2 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (30% glycerol, 0.09% sodium azide)
Storage Instruction	Store at 4°C for short term. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.

Note

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Tissue lysate)

Western blot of normal human liver lysate with SCD polyclonal antibody (Cat # PAB15510).

- Immunocytochemistry

- Immunofluorescence

Gene Info — SCD

Entrez GeneID	6319
---------------	----------------------

Protein Accession#	O00767
--------------------	------------------------

Gene Name	SCD
-----------	-----

Gene Alias	FADS5, MSTP008, SCD1
------------	----------------------

Gene Description	stearoyl-CoA desaturase (delta-9-desaturase)
------------------	--

Omim ID	604031
---------	------------------------

Gene Ontology	Hyperlink
---------------	---------------------------

Gene Summary	Stearoyl-CoA desaturase (SCD; EC 1.14.99.5) is an iron-containing enzyme that catalyzes a rate-limiting step in the synthesis of unsaturated fatty acids. The principal product of SCD is oleic acid, which is formed by desaturation of stearic acid. The ratio of stearic acid to oleic acid has been implicated in the regulation of cell growth and differentiation through effects on cell membrane fluidity and signal transduction. Four SCD isoforms, Scd1 through Scd4, have been identified in mouse. In contrast, only 2 SCD isoforms, SCD1 and SCD5 (MIM 608370), have been identified in human. SCD1 shares about 85% amino acid identity with all 4 mouse SCD isoforms, as well as with rat Scd1 and Scd2. In contrast, SCD5 shares limited homology with the rodent SCDs and appears to be unique to primates (Zhang et al. (1999) [PubMed 10229681]; Wang et al., 2005 [PubMed 15907797]).[supplied by OMIM]
--------------	--

Other Designations	OTTHUMP00000020279 acyl-CoA desaturase delta-9-desaturase fatty acid desaturase predicted protein of HQ0998 stearoyl-CoA desaturase
--------------------	---

Publication Reference

- [Role of the PI3-kinase/mTOR pathway in the regulation of the stearoyl CoA desaturase \(SCD1\) gene expression by insulin in liver.](#)

Mauvoisin D, Rocque G, Arfa O, Radenne A, Boissier P, Mounier C.

Journal of Cell Communication and Signaling 2007 Sep; 1(2):113.

Application: WB, Human, HepG2 cells

- [Critical role of stearoyl-CoA desaturase-1 \(SCD1\) in the onset of diet-induced hepatic insulin resistance.](#)

Gutierrez-Juarez R, Pocai A, Mulas C, Ono H, Bhanot S, Monia BP, Rossetti L.

The Journal of Clinical Investigation 2006 Jun; 116(6):1686.

Application: WB-Ti, Mouse, Mouse liver

Pathway

- [Biosynthesis of unsaturated fatty acids](#)
- [PPAR signaling pathway](#)

Disease

- [Alzheimer disease](#)
- [Cardiovascular Diseases](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Metabolic Syndrome X](#)
- [Neoplasms](#)
- [Obesity](#)
- [Osteoporosis](#)