

SCD polyclonal antibody

Catalog # PAB6958

Size 100 ug

Specification

Product Description	Goat polyclonal antibody raised against synthetic peptide of SCD.
Immunogen	A synthetic peptide corresponding to human SCD.
Sequence	C-RIKRTGDGNYKSG
Host	Goat
Theoretical MW (kDa)	41.5
Reactivity	Human
Form	Liquid
Purification	Antigen affinity purification
Concentration	0.5 mg/mL
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.
Recommend Usage	ELISA (1:64000) The optimal working dilution should be determined by the end user.
Storage Buffer	In Tris saline, pH 7.3 (0.5% BSA, 0.02% sodium azide)
Storage Instruction	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

- Enzyme-linked Immunoabsorbent Assay

Gene Info — SCD

Entrez GeneID [6319](#)

Protein Accession# [NP_005054.3](#)

Gene Name SCD

Gene Alias FADS5, MSTP008, SCD1

Gene Description stearyl-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

- [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.

The Biochemical Journal 2005 May; 388(Pt 1):135.

Application: WB-Tr, Insect, Monkey, COS-7, Sf9 cells

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](#)