

## Product datasheet for AP22447PU-N

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

## SCD1 (SCD) (C-term) Goat Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

**Applications:** ELISA, FC, IHC

**Recommended Dilution: Peptide ELISA:** Limit Dlution: 1/64000.

Western Blot: Preliminary experiments gave an approx 30kDa band in Human Adipose, Brain

and Liver lysates after 0.3 µg/ml antibody staining.

Immunohistochemistry on Paraffin Sections: 5-10 µg/ml.

Staining of paraffin embedded Human Liver shows textured cytoplam staining in

hepatocytes.

Flow Cytometry: Exclusively staining of HepG2 when mixed with Peripheral Blood

Lymphocytes.

Reactivity: Human

**Host:** Goat

Clonality: Polyclonal

**Immunogen:** Peptide with sequence C-RIKRTGDGNYKSG, from the C Terminus of the protein sequence

according to NP\_005054.3.

**Specificity:** Recognizes Stearoyl-CoA desaturase.

Formulation: Tris saline, pH~7.3 with 0.02% Sodium Azide and 0.5% BSA

State: Aff - Purified

State: Liquid purified Ig fraction

**Concentration:** lot specific

**Purification:** Ammonium Sulphate Precipitation followed by antigen Affinity Chromatography using the

immunizing peptide

Conjugation: Unconjugated

Storage: Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

Gene Name: stearoyl-CoA desaturase

Database Link: Entrez Gene 6319 Human

O00767





Background:

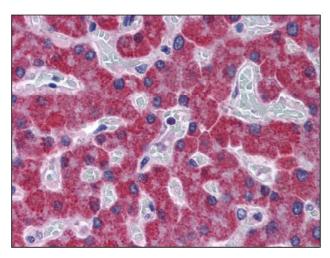
Stearoyl-CoA desaturase (SCD; EC 1.14.99.5) is an iron-containing enzyme that catalyzes a rate-limiting step in the synthesis of unsaturated fatty acids. The principal product of SCD is oleic acid, which is formed by desaturation of stearic acid. The ratio of stearic acid to oleic acid has been implicated 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).

**Synonyms:** Acyl-CoA desaturase, Fatty acid desaturase, Stearoyl-CoA desaturase

**Protein Families:** Transmembrane

**Protein Pathways:** Biosynthesis of unsaturated fatty acids, PPAR signaling pathway

## **Product images:**



SCD antibody staining of Paraffin Embedded Human Liver at 5 ug/ml. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.