

Squalene synthetase (H-300): sc-99145

BACKGROUND

Several proteins mediate the biosynthesis of cholesterol. The first specific step in the cholesterol biosynthetic pathway is the conversion of transfarnesyl-diphosphate to Squalene, which is catalyzed by the endoplasmic reticulum membrane-associated enzyme Squalene synthetase, also designated Squalene synthase and Farnesyl-diphosphate farnesyltransferase. Squalene synthetase is located at a branch point in the mevalonate pathway and is also involved in isoprenoid biosynthesis. Squalene epoxidase, also designated Squalene monooxygenase, is a multi-pass microsomal membrane-associated enzyme that catalyzes the first oxygenation step in sterol biosynthesis and most likely functions as one of the rate-limiting enzymes in this pathway. Squalene epoxidase may form a complex with Squalene synthetase.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: FDFT1 (human) mapping to 8p23.1; Fdft1 (mouse) mapping to 14 D1.

SOURCE

Squalene synthetase (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 mapping at the N-terminus of Squalene synthetase of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Squalene synthetase (H-300) is recommended for detection of Squalene synthetase of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

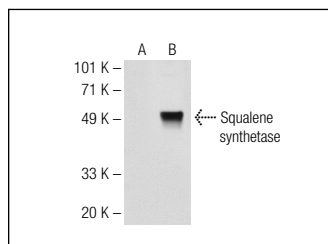
Squalene epoxidase (H-300) is also recommended for detection of Squalene epoxidase in additional species, including canine, bovine and porcine.

Suitable for use as control antibody for Squalene synthetase siRNA (h): sc-61610, Squalene synthetase siRNA (m): sc-61611, Squalene synthetase shRNA Plasmid (h): sc-61610-SH, Squalene synthetase shRNA Plasmid (m): sc-61611-SH, Squalene synthetase shRNA (h) Lentiviral Particles: sc-61610-V and Squalene synthetase shRNA (m) Lentiviral Particles: sc-61611-V.

Molecular Weight of Squalene synthetase: 55 kDa.

Positive Controls: Squalene synthetase (h): 293T Lysate: sc-113914, rat liver extract: sc-2395 or mouse liver extract: sc-2256.

DATA



Squalene synthetase (H-300): sc-99145. Western blot analysis of Squalene synthetase expression in non-transfected: sc-117752 (A) and human Squalene synthetase transfected: sc-113914 (B) 293T whole cell lysates.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Squalene synthetase (A-7): sc-271602** or **Squalene synthetase (C-10): sc-271143**, our highly recommended monoclonal alternatives to Squalene synthetase (H-300).