SANTA CRUZ BIOTECHNOLOGY, INC.

Squalene synthetase (h): 293T Lysate: sc-113914

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.

PRODUCT

Squalene synthetase (h): 293T Lysate represents a lysate of human Squalene synthetase transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

APPLICATIONS

Squalene synthetase (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Squalene synthetase antibodies. Recommended use: 10-20 µl per lane.

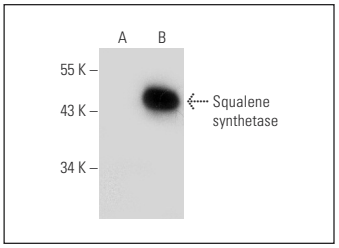
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-tranfected 293T cells.

Squalene synthetase (B-8): sc-365101 is recommended as a positive control antibody for Western Blot analysis of enhanced human Squalene synthetase expression in Squalene synthetase transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

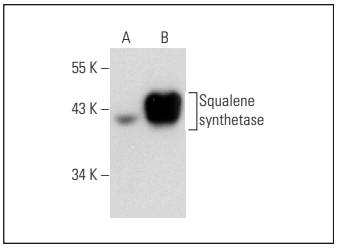
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Squalene synthetase (B-8): sc-365101. 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.



Squalene synthetase (C-10): sc-271143. 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 for detailed protocols and support products.